Actiontec®

54 Mbps

Wireless Cable Router

Model #: GT701WRU

User Manual

Solutions for the Digital Life™

Downloaded from www.Manualslib.com manuals search engine

Table of Contents

1 Introduction 1
- Package Contents 1
- Minimum System Requirements 2
- Features 2
- Getting to Know the Router 3

2 Setting Up the Router 7
- Connecting the Router to a Computer and Cable Modem 7
- Connecting the Router to a Computer and Set Top Box 23

3 Performing a Basic Setup 35
- Basic Setup 35
- Changing the User Name and Password 38

4 Using Advanced Setup 39
- Accessing Advanced Setup 39
- WAN IP Address 41
- Wireless Settings 44
- Wireless MAC Authentication 47
- Wireless Advanced Settings 48
- LAN IP Address 49
- DHCP Server 49
- Services Blocking 51
- Website Blocking 52
- Remote Management 53
- Port Forwarding 54
- DMZ Hosting 55
- Firewall 56
- Dynamic Routing 56
- Static Routing 57
- UPnP (Universal Plug and Play) 57
- MAC Address Cloning 58

5 Viewing the Router's Settings 59
- Status 59
- Routing Table 61
- WAN Status 61
- LAN Status 62
- Active User List 62

Downloaded from www.Manualslib.com manuals search engine

6 Using Utilities 63
Web Activity Log 63
Restore Default Settings 64
Upgrade Firmware 65

7 Setting Up a Network 67
Ethernet 67
USB 72
Wireless 77

8 Troubleshooting 83
Troubleshooting 83
Frequently Asked Questions 84

A Reference 91
Locating Computer Information 91
Locating Windows Operating System Files 92

B Setting Up Static IP on the Computer 95
Windows 98 SE 95
Windows Me 98
Windows 2000 101
Windows XP 105

C Computer Security 109
Comparing Broadband
Service with a Dial-Up Modem 109
Router Security 110
Computer Security 110
Electronic Security 111

D Specifications 113
General 113
Wireless Operating Range 114
LED Indicators 114
Environmental 114

E Glossary 115

F Firewall Security Level Services Table 119
High Security Level 119
Medium Security Level 120
Low Security Level 120
Basic Security Level 121
Service Acronym Definitions 121

Downloaded from www.Manualslib.com manuals search engine

G Non-Windows System Setup **123**
Classic 123
OS X 125

Notices **127**
Regulatory Compliance Notices 127
Modifications 127
Miscellaneous Legal Notices 128

Limited Warranty **129**

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Introduction 1

Thank you for purchasing the *Action*tec 54 Mbps Wireless Cable Router. The Router is the simplest way to connect computers to a high-speed broadband connection using a Ethernet cable modem or set top box. This easy-to-use product is perfect for the home office or small business. If you want to take your computing to the next level, the *Action*tec 54 Mbps Wireless Cable Router is sure to be one of the keys to your success.

Package Contents

- *Action*tec 54 Mbps Wireless Cable Router
- Black Power cord
- Yellow Ethernet cable
- Purple USB cable
- Installation Buddy™ CD
- Quick start guide

Downloaded from www.Manualslib.com manuals search engine

Minimum System Requirements

- Active DSL service with Ethernet cable/DSL modem
- Computer with a 10/100 Mbps Ethernet connection
- Microsoft Windows 98 Second Edition (SE), Millennium Edition (Me), NT 4.0, 2000, or XP; Mac OS 7.1 and above
- Internet Explorer 4.0 or higher (5.x recommended) or Netscape Navigator 4.0 or higher (4.7 recommended)
- TCP/IP network protocol installed on each computer

Features

- Plug-and-Play installation support for systems with Windows operating systems (98SE, Me, 2000, and XP)
- Ethernet WAN port (RJ-45)
- IP packet routing and transparent bridge
- Routing protocol (RIP-1, RIP-2) and static routing support
- Built-in NAT, DHCP server
- DNS relay support
- PAP/CHAP authentication, administrative passwords through Telnet
- 64-, 128-, and 256-bit WEP/WPA wireless LAN security
- 802.1x, WPA, and WPA-PSK for additional security wireless LAN security
- Compliant with IEEE 802.3 Ethernet standard
- 10/100 Base-T Ethernet ports (4)
- Flow control support for Fast Ethernet
- Web-based configuration setup
- Default configuration backup restore

Downloaded from www.Manualslib.com manuals search engine

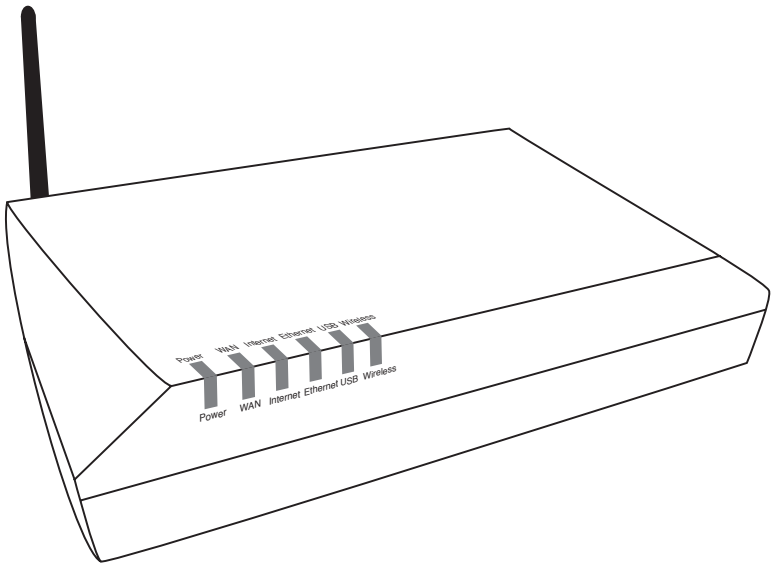
- FTP firmware upgradeable
- Web download support
- 802.11b/g support

Getting to Know the Router

This section contains a quick description of the Router's lights, ports, etc. The Router contains several indicator lights (LEDs) on its front panel and a series of ports on its rear panel.

Front Panel

The front panel of the Router features six lights: Power, WAN, Internet, Ethernet, USB, and Wireless.



Power Light

The Power light displays the Router's current status. If the Power light glows steadily green, the Router is receiving power and fully operational. When the Power light flashes rapidly, the Router is initializing. If the Power light is not illuminated when the power cord is plugged in, the Router has suffered a critical error and technical support should be contacted.

Downloaded from www.Manualslib.com manuals search engine

WAN Light

When the WAN light glows steadily, the Router is connected to the cable modem or set top box.

Internet Light

When the Internet light glows green, the Router is connected to the Internet through the ISP (Internet Service Provider). When it glows red, the Router is not connected to the Internet.

Ethernet Light

The Ethernet light illuminates when the Router is connected via its Ethernet port.

USB Light

When the USB light glows, the Router is connected via its USB port.

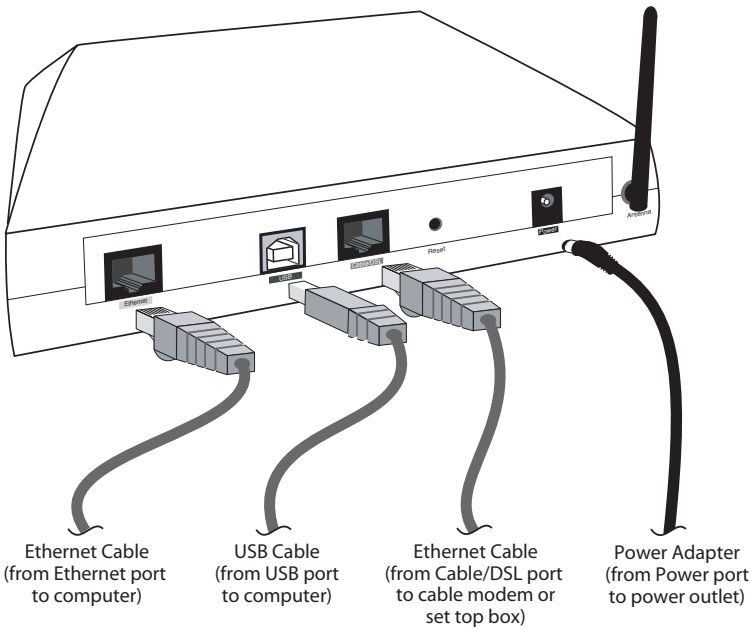
Wireless Light

The Wireless light illuminates when the Router is connected wirelessly.

Downloaded from www.Manualslib.com manuals search engine

Rear Panel

The rear panel of the Router contains four ports (Ethernet, USB, Cable/DSL, and Power), as well as a Reset switch.



Ethernet Port

The Ethernet port is used to connect a computer to the Router via Ethernet cable. The Ethernet port is a 10/100 Mbps auto-sensing port, and either a straight-through or crossover Ethernet cable can be used when connecting to the port.

USB Port

The USB port is used to connect the Router to an computer via USB cable.

Cable/DSL Port

The Cable/DSL port is used to connect the Router to an Ethernet cable modem or set top box.

Downloaded from www.Manualslib.com manuals search engine

Reset Switch

Depressing the Reset switch for one or two seconds will power cycle the Router (similar to unplugging and then plugging in the Router's Power cord). To restore the Router's factory default settings, depress and hold the Reset switch for approximately 15 seconds. The reset process will start about 10 seconds after releasing the switch.

Power Port

The Power port is used to connect the Power cord to the Router.

Warning: Do not unplug the Power cord from the Router during the reset process. Doing so may result in permanent damage to the Router.

Downloaded from www.Manualslib.com manuals search engine

Setting Up the Router

2

The instructions that follow parallel the steps contained in the *Action*tec Installation Buddy®, which provides a visual guide to setting up the Router. It is recommended the user run the Installation Buddy first, before attempting any other procedures.

To set up the Router, it must be connected to a computer and a cable modem or set top box, and then configured. After connecting this first computer, other computers can be added to the network via Ethernet, USB, or wirelessly (see "Setting Up a Network" on page 67).

Connecting the Router to a Computer and Cable Modem

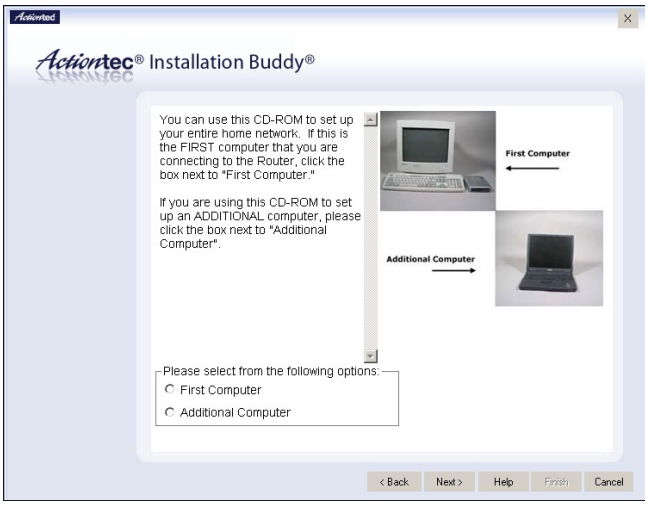
This section describes the installation procedure to connect the Router to a computer and cable modem. If connecting the Router to a computer and set top box, see page 23.

1. Insert the Installation CD in the CD-ROM drive of the computer. The Installation Buddy starts automatically. Wait until the following screen appears, read the on-screen instructions, select the service provider by clicking in the appropriate circle, then click **Next**.

Actiontec® Installation Buddy®
Welcome to the Actiontec Installation Buddy for your Cable Broadband Connection !
This Installation Buddy will walk you through the easy steps to connect your Cable Router.
Click NEXT to begin the setup.
My Service Provider is:
AOL
NTL
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

2. Read the instructions, select **First Computer** by clicking in the appropriate circle, then click **Next**.

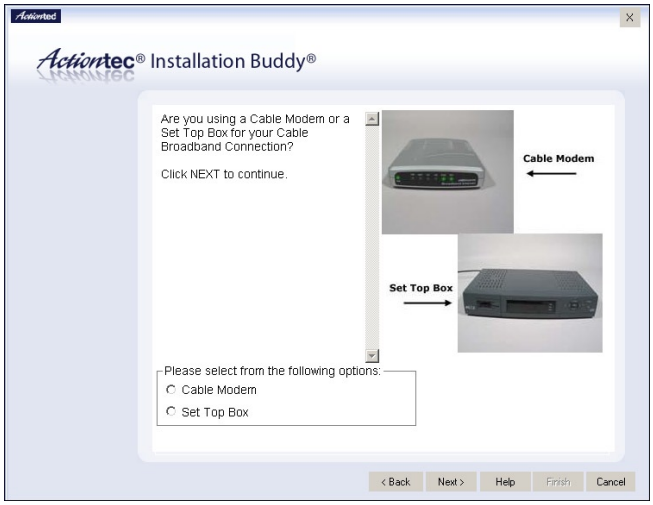

Actiontec® Installation Buddy®
You can use this CD-ROM to set up your entire home network. If this is the FIRST computer that you are connecting to the Router, click the box next to "First Computer."
If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".
First Computer
Additional Computer
Please select from the following options:
First Computer
Additional Computer
< Back
Next >
Help
Finish
Cancel

3. If **AOL** was selected in step 1, enter the user name and password provided by America Online in the appropriate text boxes, then click **Next**.
If **NTL** was selected in step 1, skip this step and go to step 4.

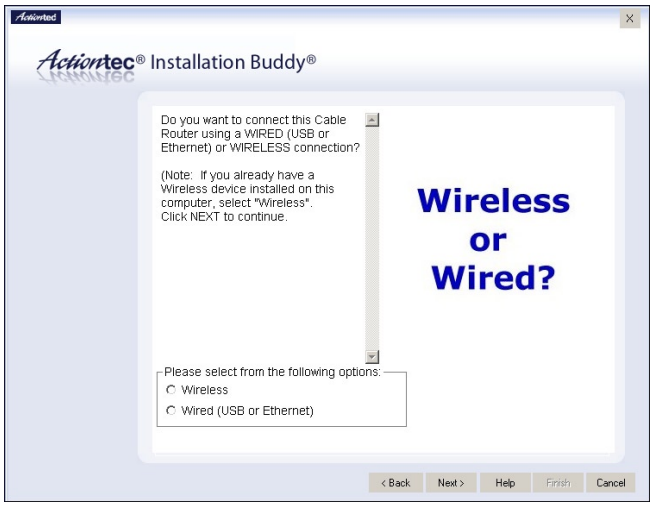
Actiontec® Installation Buddy®
Please enter your AOL User Name and Password as provided by your ISP.
Click NEXT to continue once the AOL information is entered below.
Enter your PPP User Name here
Enter your PPP Password here
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

4. Select Cable Modem by clicking in the appropriate circle, then click **Next**.



5. Select the type of connection used between the Router and computer, then click **Next**.

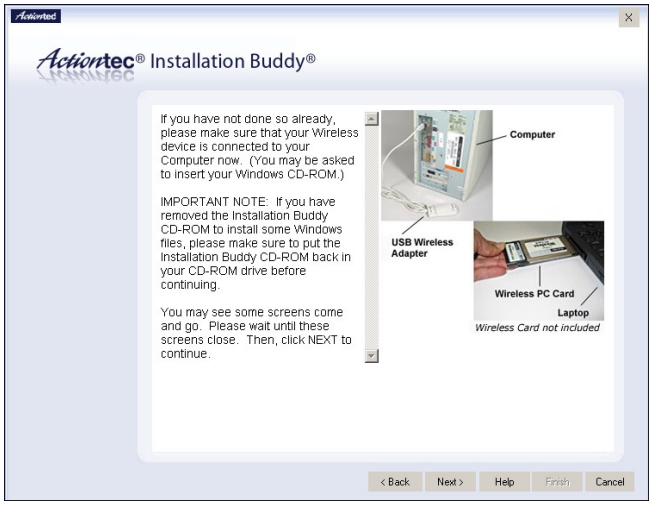

Actiontec® Installation Buddy®
Do you want to connect this Cable Router using a WIRED (USB or Ethernet) or WIRELESS connection?
(Note: If you already have a Wireless device installed on this computer, select "Wireless".
Click NEXT to continue.
Wireless or Wired?
Please select from the following options:
Wireless
Wired (USB or Ethernet)
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

6. If **Wired** was selected in step 5, select the type of wired connection between the Router to the computer, then click **Next**.

Actiontec® Installation Buddy®
Based on the answers to the questions that you have supplied, you may connect this Cable Router to your Computer in the following way(s):
(NOTE: USB connection is not supported on the 1st Computer setup if you are using the Set Top Box)
USB Port
Ethernet Port
Please select the PC connection type below:
Ethernet (Recommended)
USB
< Back
Next >
Help
Finish
Cancel

If **Wireless** was selected in step 5, read the on-screen information, then click **Next**.


Actiontec® Installation Buddy®
If you have not done so already, please make sure that your Wireless device is connected to your Computer now. (You may be asked to insert your Windows CD-ROM.)
IMPORTANT NOTE: If you have removed the Installation Buddy CD-ROM to install some Windows files, please make sure to put the Installation Buddy CD-ROM back in your CD-ROM drive before continuing.
You may see some screens come and go. Please wait until these screens close. Then, click NEXT to continue.
Computer
USB Wireless Adapter
Wireless PC Card
Laptop
Wireless Card not included
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

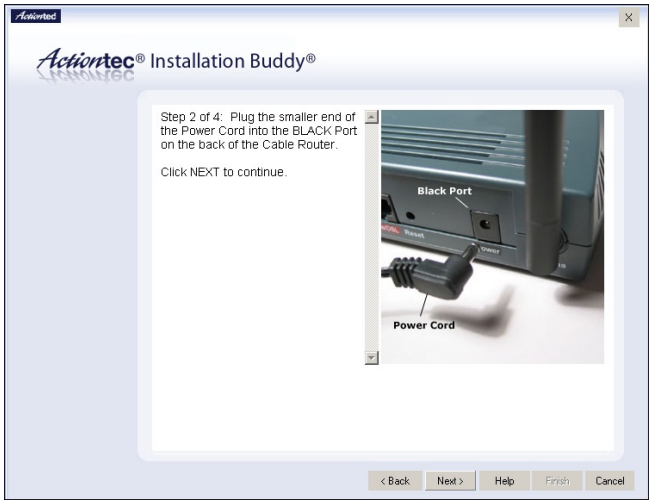
7. Read the on-screen instructions, then click **Next**.

Actiontec® Installation Buddy®
If at anytime during this process you are confused or unsure as to what to do, please call our 24-hour Technical Support Center on 0845 65 80511. Local rates apply.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

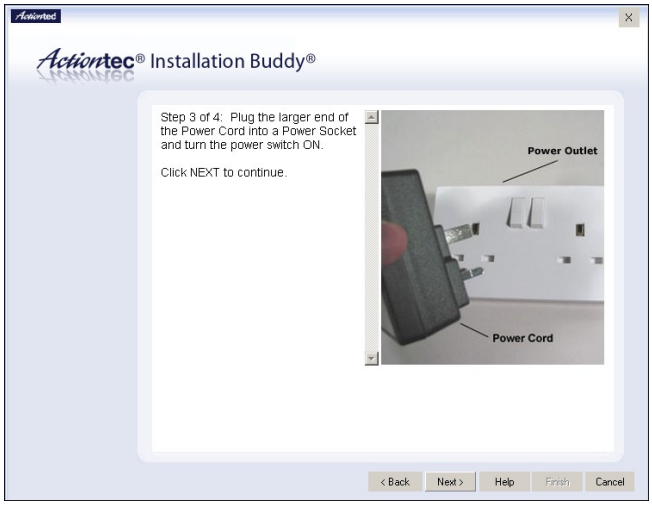
8. Get the **black Power cord** from the kit, then click **Next**.

Downloaded from www.Manualslib.com manuals search engine

9. Plug the **smaller end** of the **black Power cord** into the **black Power port** on the **back of the Router**, then click **Next**.

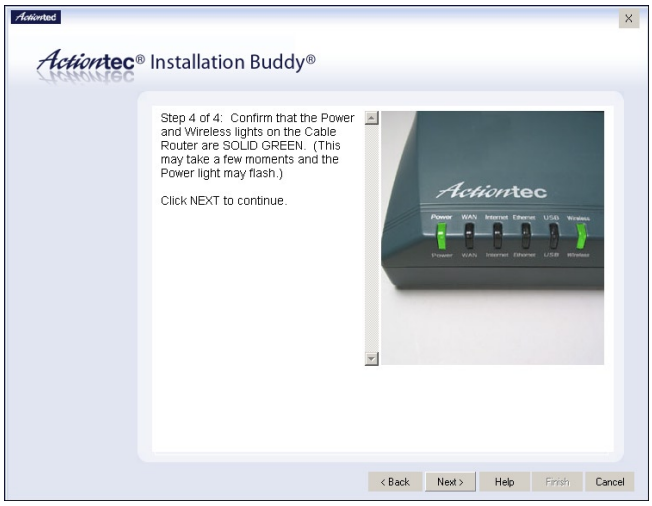

Actiontec® Installation Buddy®
Step 2 of 4: Plug the smaller end of the Power Cord into the BLACK Port on the back of the Cable Router.
Click NEXT to continue.
Black Port
Power Cord
< Back
Next >
Help
Finish
Cancel

10. Plug the **larger end** of the of **black Power cord** into a **power socket**, turn the **power switch ON**, then click **Next**.


Actiontec® Installation Buddy®
Step 3 of 4: Plug the larger end of the Power Cord into a Power Socket and turn the power switch ON.
Click NEXT to continue.
Power Outlet
Power Cord
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

11. Make sure the **Power light** on the front of the Router **glows solid green**. Click **Next**.


Actiontec® Installation Buddy®
Step 4 of 4: Confirm that the Power and Wireless lights on the Cable Router are SOLID GREEN. (This may take a few moments and the Power light may flash.)
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

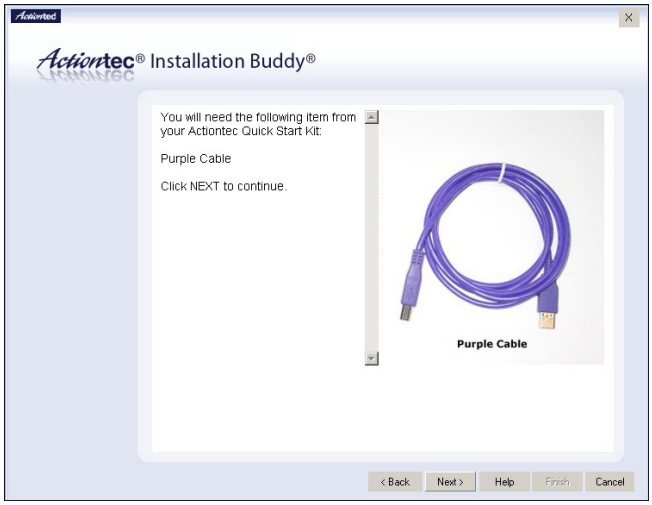
12. Read the on-screen information, then **turn off** the **cable modem**. Click **Next**.

Actiontec® Installation Buddy®
Before we begin, please make sure that you have an active broadband connection via your Cable Modem.
NOTE: Your cable modem may look different depending on the model of modem being used.
Please Unplug or Turn Off your Cable Modem before proceeding.
Click NEXT to continue.
Cable Modem
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

13. If **Ethernet** was selected in step 6, get the **yellow Ethernet cable** from the kit. Click **Next**.

If **USB** was selected in step 6, get the **purple USB cable** from the kit. Click **Next**.

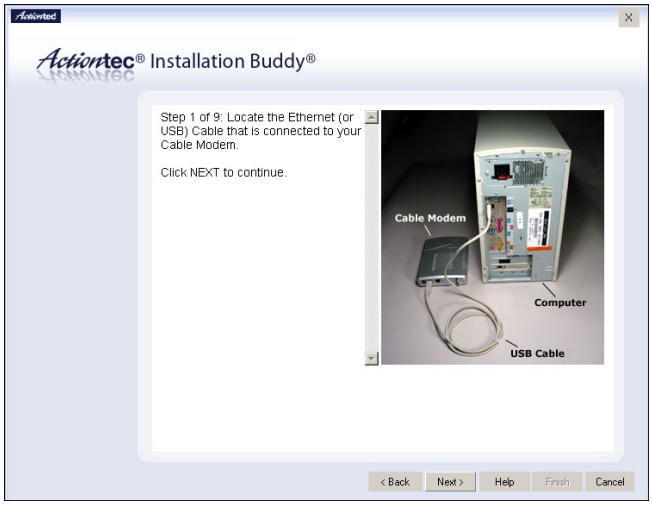


If connecting wirelessly, skip this step and go to step 14.

Downloaded from www.Manualslib.com manuals search engine

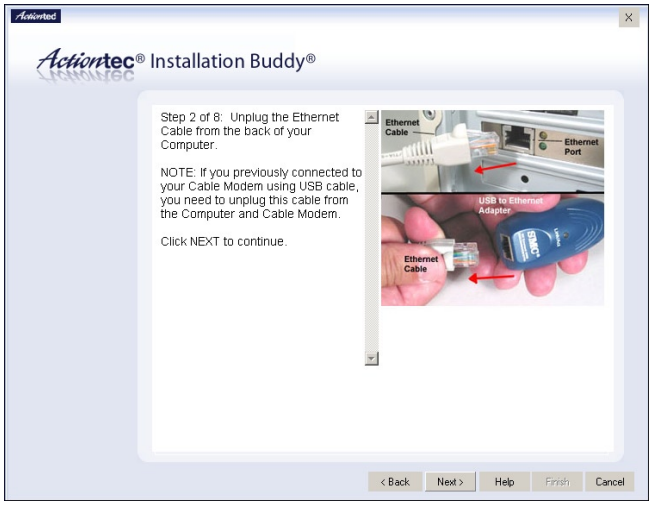
14. If connecting via Ethernet or wirelessly, find the **Ethernet cable** currently connected to the **cable modem**. Click **Next**.

If connecting via USB , find the **USB cable** currently connected to the **cable modem**. Click **Next**.

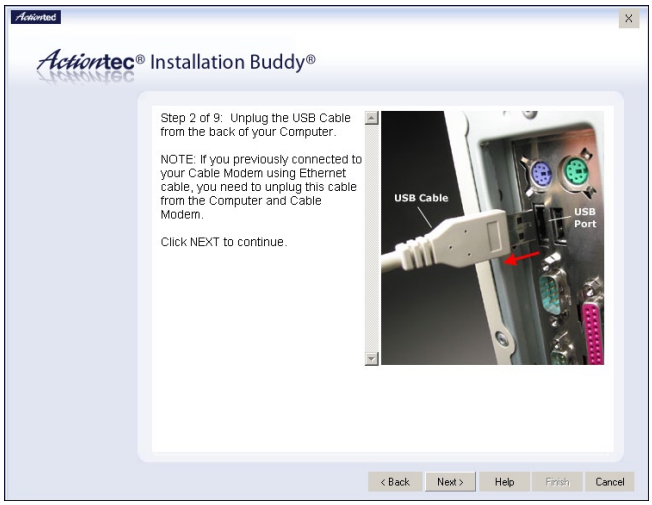


Downloaded from www.Manualslib.com manuals search engine

15. If connecting via Ethernet or wirelessly, **unplug the Ethernet cable** located in step 14 from the **back of the computer**. If the cable modem was connected via a USB cable adapter, unplug the Ethernet cable from both the modem and the adapter. Click **Next**.


Actiontec® Installation Buddy®
Step 2 of 8: Unplug the Ethernet Cable from the back of your Computer.
NOTE: If you previously connected to your Cable Modem using USB cable, you need to unplug this cable from the Computer and Cable Modem.
Click NEXT to continue.
Ethernet Cable
Ethernet Port
USB to Ethernet Adapter
Ethernet Cable
< Back
Next >
Help
Finish
Cancel

If connecting via USB, unplug the USB cable located in step 14 from the back of the computer. Click **Next**.

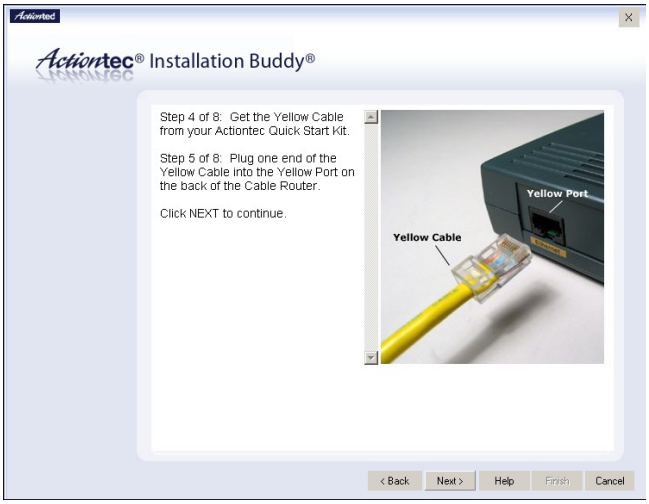

Actiontec® Installation Buddy®
Step 2 of 9: Unplug the USB Cable from the back of your Computer.
NOTE: If you previously connected to your Cable Modem using Ethernet cable, you need to unplug this cable from the Computer and Cable Modem.
Click NEXT to continue.
USB Cable
USB Port
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

16. Turn on the cable modem, then click **Next**.

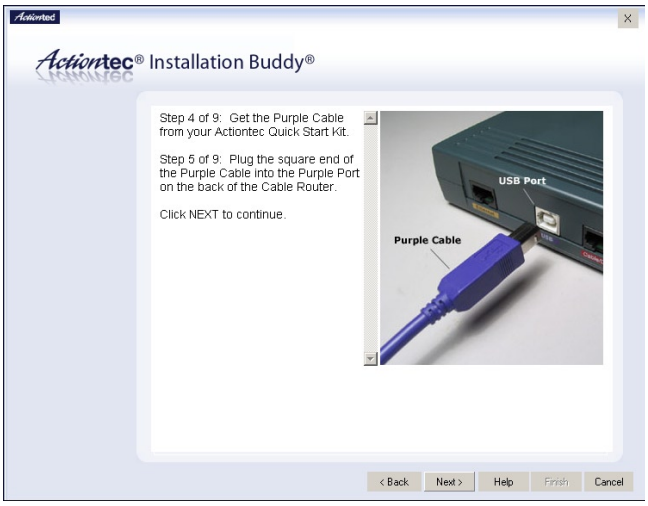
Actiontec® Installation Buddy®
Step 3 of 8: Make sure to Turn ON or Plug in your Cable Modem at this time.
Click NEXT to continue.
Cable Modem
< Back
Next >
Help
Finish
Cancel

17. If connecting via Ethernet, plug the **yellow Ethernet cable** into the **yellow Ethernet port** on the **back of the Router**, then click **Next**.


Actiontec® Installation Buddy®
Step 4 of 8: Get the Yellow Cable from your Actiontec Quick Start kit.
Step 5 of 8: Plug one end of the Yellow Cable into the Yellow Port on the back of the Cable Router.
Click NEXT to continue.
Yellow Port
Yellow Cable
< Back
Next >
Help
Finish
Cancel

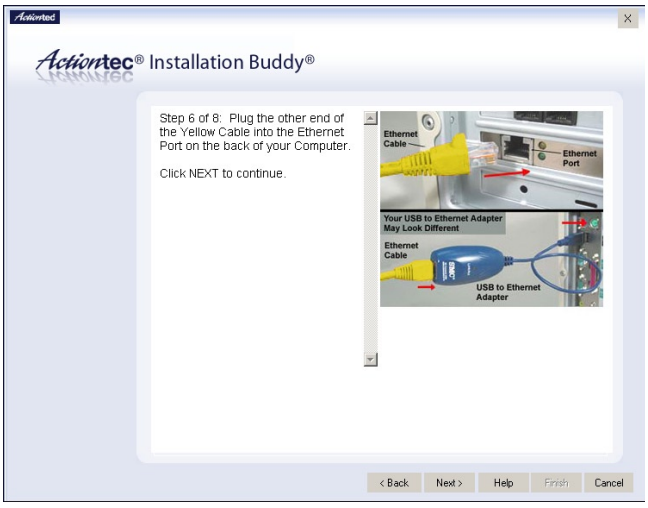
Downloaded from www.Manualslib.com manuals search engine

If connecting via USB, plug the **square end** of the **purple USB cable** into the **USB port** on the **back of the Router**, then click **Next**.


Actiontec® Installation Buddy®
Step 4 of 9: Get the Purple Cable from your Actiontec Quick Start Kit.
Step 5 of 9: Plug the square end of the Purple Cable into the Purple Port on the back of the Cable Router.
Click NEXT to continue.
USB Port
Purple Cable
< Back
Next >
Help
Finish
Cancel

If connecting wirelessly, skip this step and go to step 22.

18. If connecting via Ethernet, plug the **other end** of the **yellow Ethernet cable** into an **Ethernet port** on the **back of the computer**. Click **Next**.


Actiontec® Installation Buddy®
Step 6 of 8: Plug the other end of the Yellow Cable into the Ethernet Port on the back of your Computer.
Click NEXT to continue.
Ethernet Cable
Ethernet Port
Your USB to Ethernet Adapter May Look Different
Ethernet Cable
USB to Ethernet Adapter
< Back
Next >
Help
Finish
Cancel

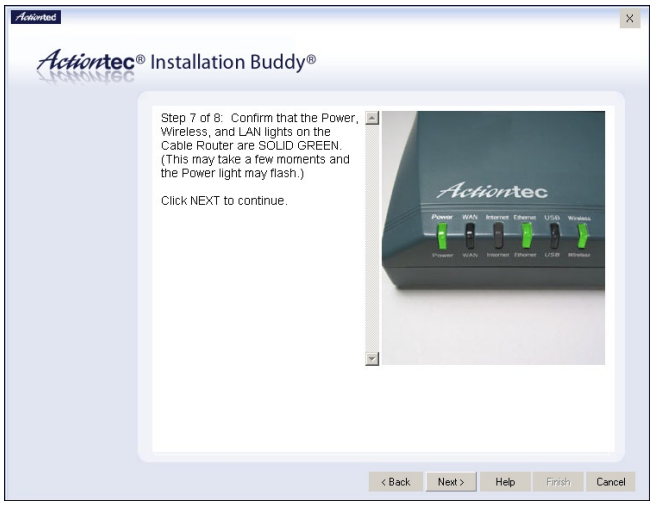
☞ ***Note***: An Ethernet port looks similar to a phone jack, but is slightly larger.

Downloaded from www.Manualslib.com manuals search engine

If connecting via USB, plug the **flat, rectangular end** of the **purple USB cable** into a **USB port** on the **front or back of the computer**. Click **Next**.

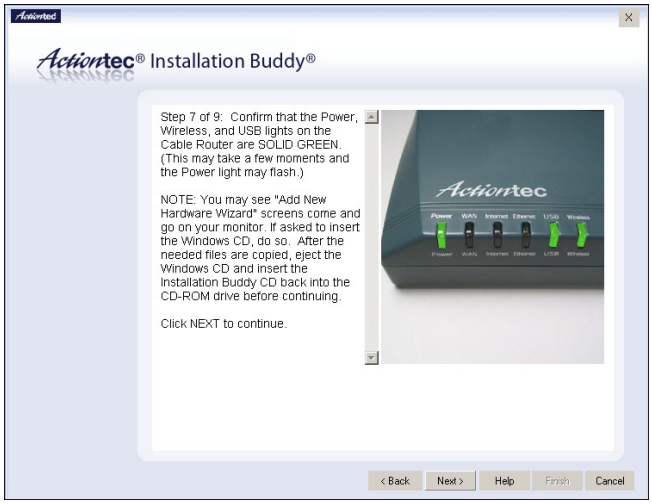
Actiontec® Installation Buddy®
Step 6 of 9: Plug the thin rectangular end of the Purple Cable into the USB Port on the front or back of your Computer.
Click NEXT to continue.
Computer
USB Port
Purple Cable
Computer
Your Computer may look slightly different
< Back
Next >
Help
Finish
Cancel

19. If connecting via Ethernet, make sure the **Power**, **Ethernet**, and **Wireless lights** glow solid green. This may take a few moments. Click **Next**.



Downloaded from www.Manualslib.com manuals search engine

If connecting via USB, make sure the **Power**, **USB**, and **Wireless lights** glow solid green. This may take a few moments. Click **Next**.

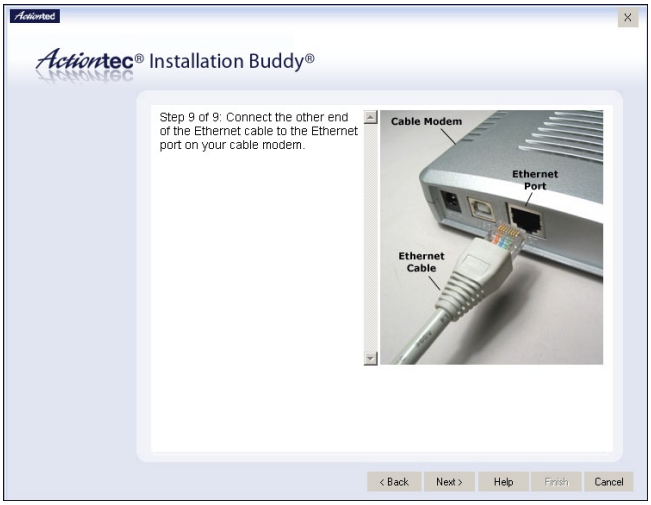

Actiontec® Installation Buddy®
Step 7 of 9: Confirm that the Power, Wireless, and USB lights on the Cable Router are SOLID GREEN. (This may take a few moments and the Power light may flash.)
NOTE: You may see "Add New Hardware Wizard" screens come and go on your monitor. If asked to insert the Windows CD, do so. After the needed files are copied, eject the Windows CD and insert the Installation Buddy CD back into the CD-ROM drive before continuing.
Click NEXT to continue.
Actiontec
Power WAN Internet Ethernet USB Wireless
< Back
Next >
Help
Finish
Cancel

20. Find the **loose end** of the **Ethernet cable connected to the cable modem** and plug it into the **red Cable/DSL port** on the **back of the Router**, then click **Next**.

Actiontec® Installation Buddy®
Step 8 of 8: Locate the loose end of the Ethernet Cable from the Cable Modem and plug it into the Red port on the back of your Actiontec Cable Router.
Click NEXT to continue.
Red Port
USB
Cable/DSL
Reset
Ethernet Cable
< Back
Next >
Help
Finish
Cancel

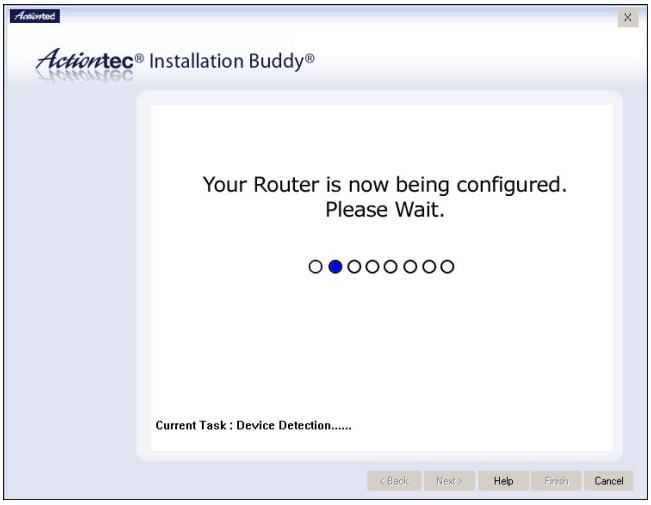
Downloaded from www.Manualslib.com manuals search engine

21. If connecting via USB, plug the other end of the **Ethernet cable** into the **Ethernet port** on the cable modem, then click **Next**.


Actiontec® Installation Buddy®
Step 9 of 9: Connect the other end of the Ethernet cable to the Ethernet port on your cable modem.
Cable Modem
Ethernet Port
Ethernet Cable
< Back
Next >
Help
Finish
Cancel

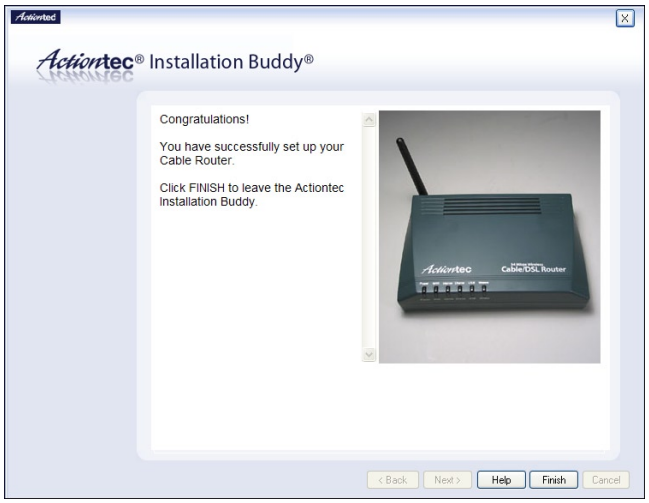
If connecting via Ethernet, skip this step and go to step 22.

22. The Router is configured.



Downloaded from www.Manualslib.com manuals search engine

22. When the configuration process finishes successfully, a congratulations screen appears.



The Router is successfully configured and ready for use.

To make changes to the Router's Advanced Configuration settings, see Chapter 4, "Using Advanced Setup," on page 39.

To create a network by connecting more computers to the Router, see Chapter 6, "Setting Up a Network," on page 67.

Downloaded from www.Manualslib.com manuals search engine

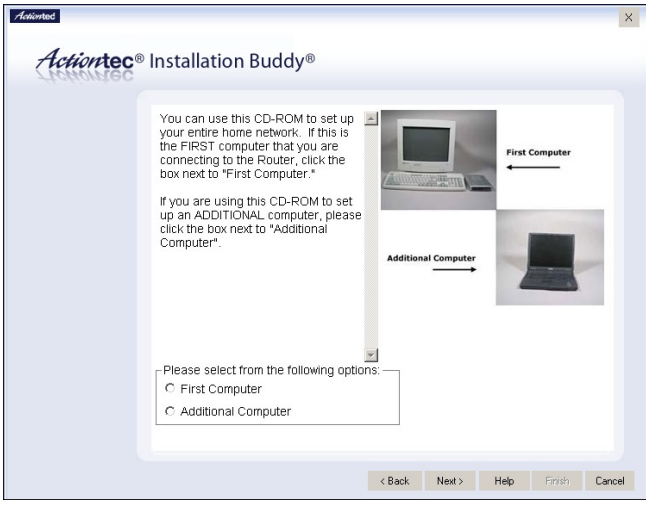
Connecting the Router to a Computer and Set Top Box

This section describes the installation procedure to connect the Router to a computer and set top box. If connecting the Router to a computer and cable modem, see page 7.

1. Insert the Installation CD in the CD-ROM drive of the computer. The Installation Buddy starts automatically. Wait until the following screen appears, read the on-screen instructions, select the service provider by clicking in the appropriate circle, then click **Next**.

Actiontec® Installation Buddy®
Welcome to the Actiontec Installation Buddy for your Cable Broadband Connection !
This Installation Buddy will walk you through the easy steps to connect your Cable Router.
Click NEXT to begin the setup.
Cable/DSL Router
My Service Provider is:
AOL
NTL
< Back
Next >
Help
Finish
Cancel

2. Read the instructions, select **First Computer** by clicking in the appropriate circle, then click **Next**.

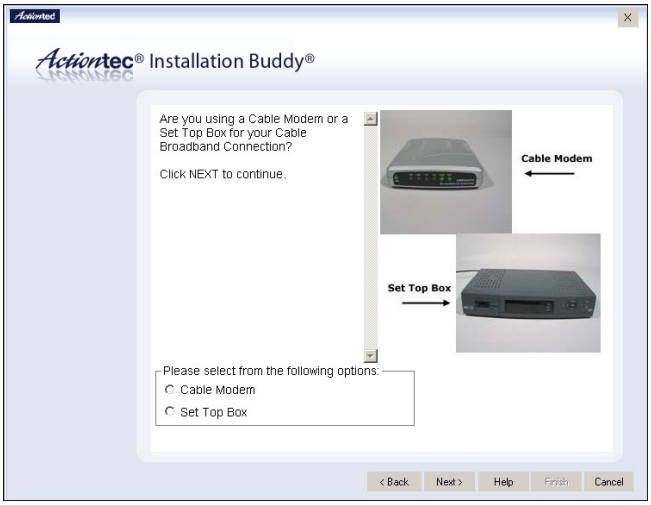

Actiontec® Installation Buddy®
You can use this CD-ROM to set up your entire home network. If this is the FIRST computer that you are connecting to the Router, click the box next to "First Computer."
If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".
First Computer
Additional Computer
Please select from the following options:
First Computer
Additional Computer
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

3. If **AOL** was selected in step 1, enter the user name and password provided by America Online in the appropriate text boxes, then click **Next**.
If **NTL** was selected in step 1, skip this step and go to step 4.

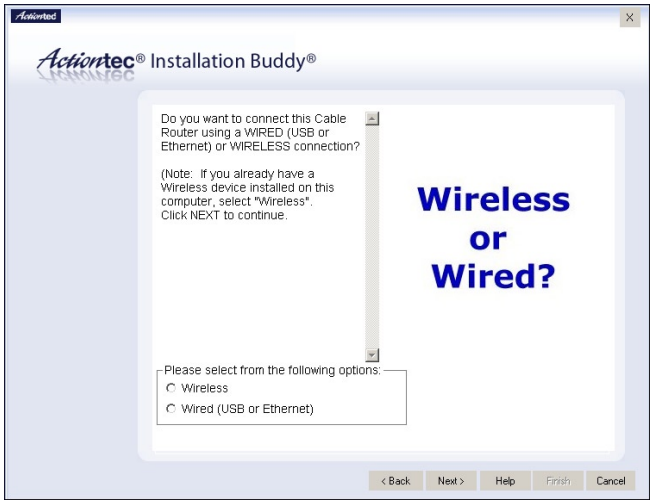
Actiontec® Installation Buddy®
Please enter your AOL User Name and Password as provided by your ISP.
Click NEXT to continue once the AOL information is entered below.
Enter your PPP User Name here
Enter your PPP Password here
< Back
Next >
Help
Finish
Cancel

4. Select **Set Top Box**, then click **Next**.

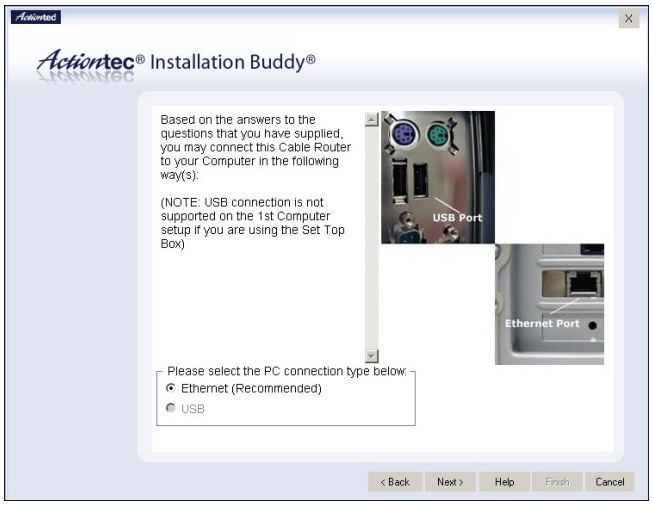


Downloaded from www.Manualslib.com manuals search engine

5. Select the type of connection used between the Router and computer, then click **Next**.


Actiontec® Installation Buddy®
Do you want to connect this Cable Router using a WIRED (USB or Ethernet) or WIRELESS connection?
(Note: If you already have a Wireless device installed on this computer, select "Wireless". Click NEXT to continue.
Wireless or Wired?
Please select from the following options:
Wireless
Wired (USB or Ethernet)
< Back
Next >
Help
Finish
Cancel

6. If **Wired** was selected in step 5, select **Ethernet**, then click **Next**.


Actiontec® Installation Buddy®
Based on the answers to the questions that you have supplied, you may connect this Cable Router to your Computer in the following way(s):
(NOTE: USB connection is not supported on the 1st Computer setup if you are using the Set Top Box)
USB Port
Ethernet Port
Please select the PC connection type below:
Ethernet (Recommended)
USB
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

If **Wireless** was selected in step 5, read the on-screen information, then click **Next**.

Actiontec® Installation Buddy®
If you have not done so already, please make sure that your Wireless device is connected to your Computer now. (You may be asked to insert your Windows CD-ROM.)
IMPORTANT NOTE: If you have removed the Installation Buddy CD-ROM to install some Windows files, please make sure to put the Installation Buddy CD-ROM back in your CD-ROM drive before continuing.
You may see some screens come and go. Please wait until these screens close. Then, click NEXT to continue.
Computer
USB Wireless Adapter
Wireless PC Card
Laptop
Wireless Card not included
< Back
Next >
Help
Finish
Cancel

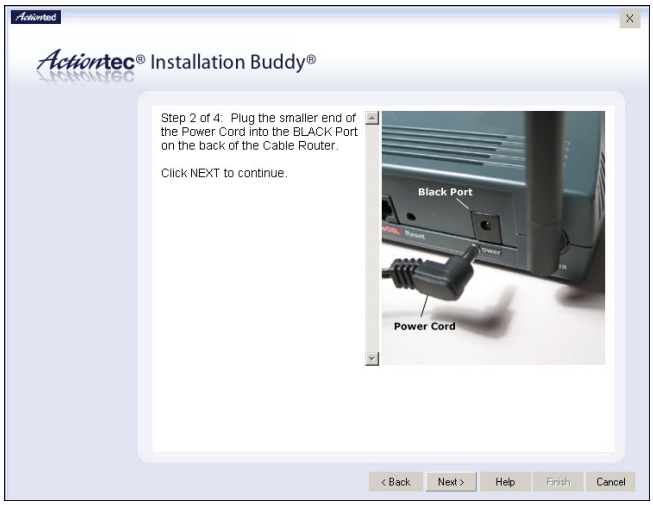
7. Read the on-screen instructions, then click **Next**.

Actiontec® Installation Buddy®
If at anytime during this process you are confused or unsure as to what to do, please call our 24-hour Technical Support Center on 0845 65 80511. Local rates apply.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

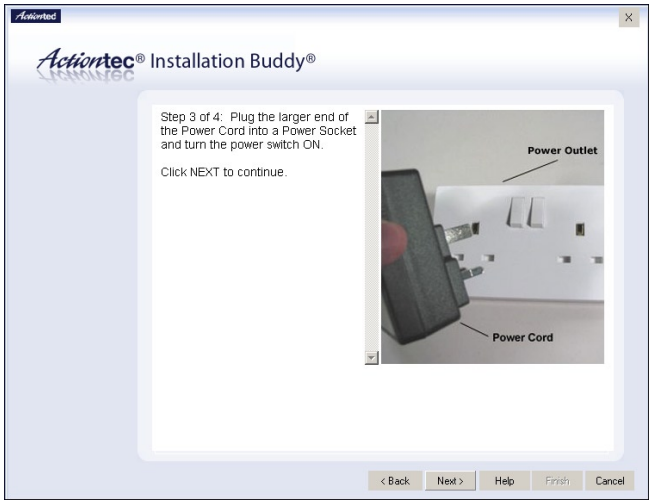
8. Get the **black Power cord** from the kit, then click **Next**.

9. Plug the **smaller end** of the **black Power cord** into the **black Power port** on the **back of the Router**, then click **Next**.

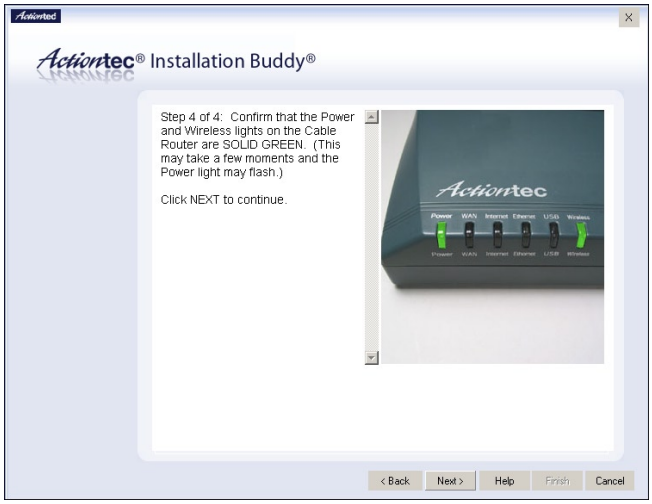

Actiontec® Installation Buddy®
Step 2 of 4: Plug the smaller end of the Power Cord into the BLACK Port on the back of the Cable Router.
Click NEXT to continue.
Black Port
Power Cord
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

10. Plug the **larger end** of the of **black Power cord** into a **power socket**, turn the **power switch ON**, then click **Next**.


Actiontec® Installation Buddy®
Step 3 of 4: Plug the larger end of the Power Cord into a Power Socket and turn the power switch ON.
Click NEXT to continue.
Power Outlet
Power Cord
< Back
Next >
Help
Finish
Cancel

11. Make sure the **Power light** on the front of the Router **glows solid green**. Click **Next**.



Downloaded from www.Manualslib.com manuals search engine

12. Read the on-screen information, then click **Next**.

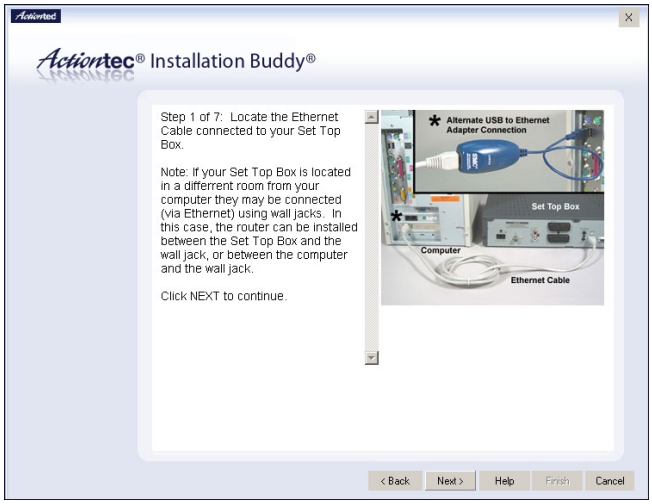
Actiontec® Installation Buddy®
Before we begin, please make sure that you have an active broadband connection via your Set Top Box.
Click NEXT to continue.
Set Top Box
Your Set Top Box may look different
< Back
Next >
Help
Finish
Cancel

13. If connecting via **Ethernet**, get the **yellow Ethernet cable** from the kit. Click **Next**.

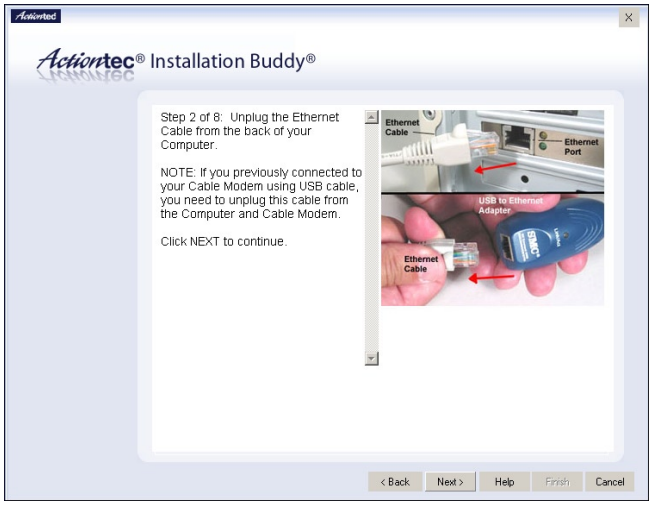
If connecting wirelessly, skip this step and go to step 14.

Downloaded from www.Manualslib.com manuals search engine

14. Find the **Ethernet cable** currently connected to the **set top box**. Click **Next**.

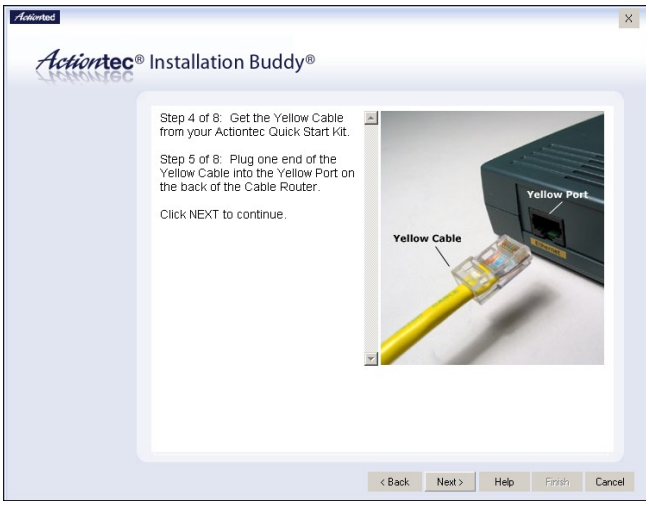

Actiontec® Installation Buddy®
Step 1 of 7: Locate the Ethernet Cable connected to your Set Top Box.
Note: If your Set Top Box is located in a different room from your computer they may be connected (via Ethernet) using wall jacks. In this case, the router can be installed between the Set Top Box and the wall jack, or between the computer and the wall jack.
Click NEXT to continue.
Alternate USB to Ethernet Adapter Connection
Set Top Box
Computer
Ethernet Cable
< Back
Next >
Help
Finish
Cancel

15. Unplug the **Ethernet cable** located in step 14 from the back of the computer. If the set top box was connected via a USB cable adapter, unplug the cable from both the set top box and the adapter. Click **Next**.


Actiontec® Installation Buddy®
Step 2 of 8: Unplug the Ethernet Cable from the back of your Computer.
NOTE: If you previously connected to your Cable Modem using USB cable, you need to unplug this cable from the Computer and Cable Modem.
Click NEXT to continue.
Ethernet Cable
Ethernet Port
USB to Ethernet Adapter
Ethernet Cable
< Back
Next >
Help
Finish
Cancel

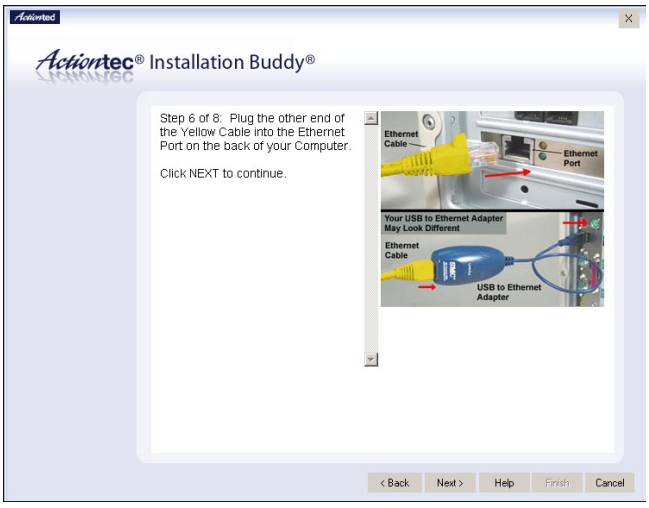
Downloaded from www.Manualslib.com manuals search engine

16. If connecting via Ethernet, plug the **yellow Ethernet cable** into the **yellow Ethernet port** on the **back of the Router**, then click **Next**.


Actiontec® Installation Buddy®
Step 4 of 8: Get the Yellow Cable from your Actiontec Quick Start Kit.
Step 5 of 8: Plug one end of the Yellow Cable into the Yellow Port on the back of the Cable Router.
Click NEXT to continue.
Yellow Port
Yellow Cable
< Back
Next >
Help
Finish
Cancel

If connecting wirelessly, skip this step and go to step 21.

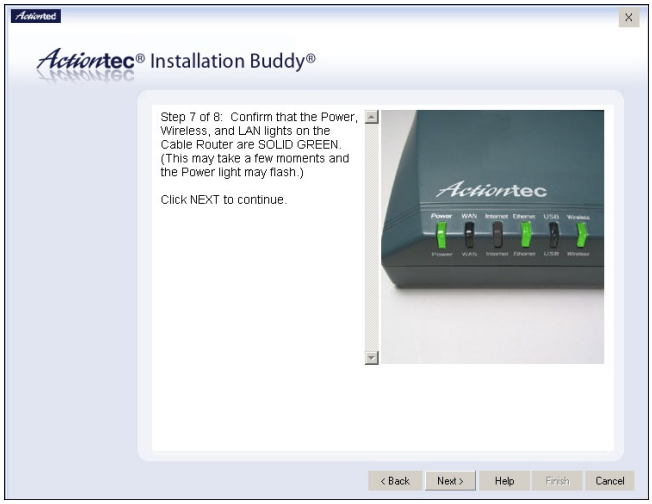
17. Plug the **other end** of the **yellow Ethernet cable** into an **Ethernet port** on the **back of the computer**. Click **Next**.


Actiontec® Installation Buddy®
Step 6 of 8: Plug the other end of the Yellow Cable into the Ethernet Port on the back of your Computer.
Click NEXT to continue.
Ethernet Cable
Ethernet Port
Your USB to Ethernet Adapter May Look Different
Ethernet Cable
USB to Ethernet Adapter
< Back
Next >
Help
Finish
Cancel

☞ ***Note***: An Ethernet port looks similar to a phone jack, but is slightly larger.

Downloaded from www.Manualslib.com manuals search engine

18. Make sure the **Power**, **Ethernet**, and **Wireless lights** glow solid green. This may take a few moments. Click **Next**.


Actiontec® Installation Buddy®
Step 7 of 8: Confirm that the Power, Wireless, and LAN lights on the Cable Router are SOLID GREEN. (This may take a few moments and the Power light may flash.)
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

19. Find the **loose end** of the **Ethernet cable** connected to the **set top box** and plug it into the **red Cable/DSL port** on the **back of the Router**, then click **Next**.

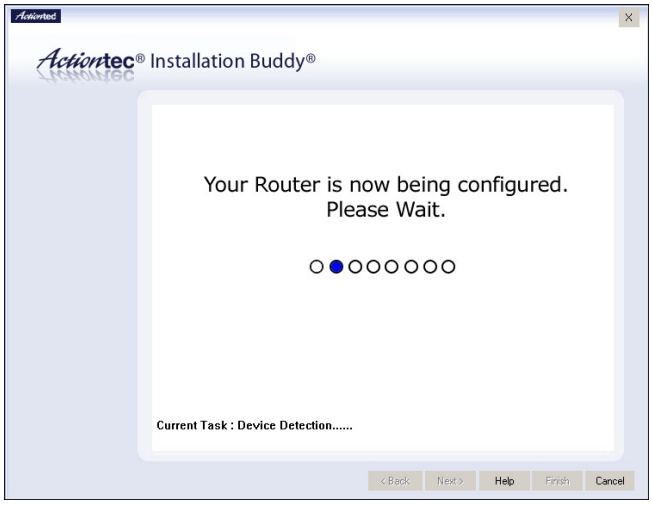
Actiontec® Installation Buddy®
Step 8 of 8: Locate the loose end of the Ethernet Cable from the Cable Modem and plug it into the Red port on the back of your Actiontec Cable Router.
Click NEXT to continue.
Red Port
Ethernet Cable
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

20. Select the **network adapter** installed in the computer from the drop-down list. If the network adapter is not listed, enter the adapter's **MAC** (**Media Access Control**) **address** in the appropriate text boxes. Click **Next**..

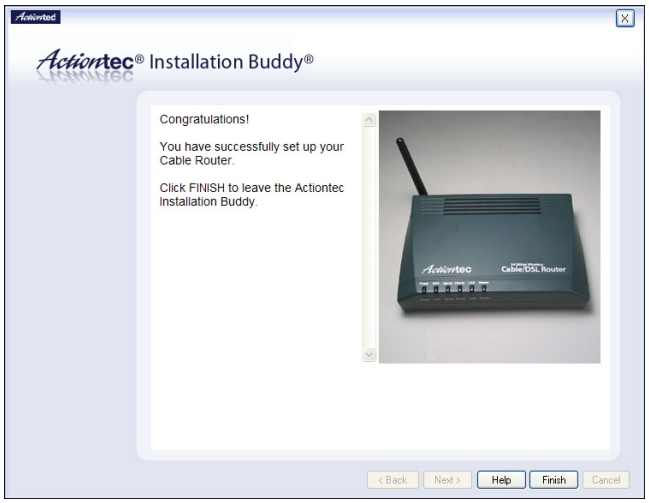
Actiontec® Installation Buddy®
Please select the Network Adapter you are using to connect to the Cable Router from the drop-down list below.
If the Network Adapter does not appear in the drop-down list, click on the check box and manually enter the MAC Address of your Network Adapter.
Realtek RTL8139 Family PCI Fast Ethernet NIC - Packet Scheduler Miniport
Click here to enter your Mac address manually
Mac Address: 00 - 50 - fc - 4d - 90 - e2
< Back
Next >
Help
Finish
Cancel

21. The Router is configured.



Downloaded from www.Manualslib.com manuals search engine

22. When the configuration process finishes successfully, a congratulations screen appears.



The Router is successfully configured and ready for use.

To make changes to the Router's Advanced Configuration settings, see Chapter 4, "Using Advanced Setup," on page 39.

To create a network by connecting more computers to the Router, see Chapter 6, "Setting Up a Network," on page 67.

Downloaded from www.Manualslib.com manuals search engine

Performing a Basic Setup

3

This chapter is a guide through a basic setup of the Router, including how to connect the Router to the Internet Service Provider (ISP) and changing the user name and password.

To complete a basic setup, the user will need information provided by the ISP. This information is sometimes provided in a welcome letter or ISP worksheet. If this document is not available, contact the ISP immediately and request one.

Basic Setup

To configure the Router for basic operation:

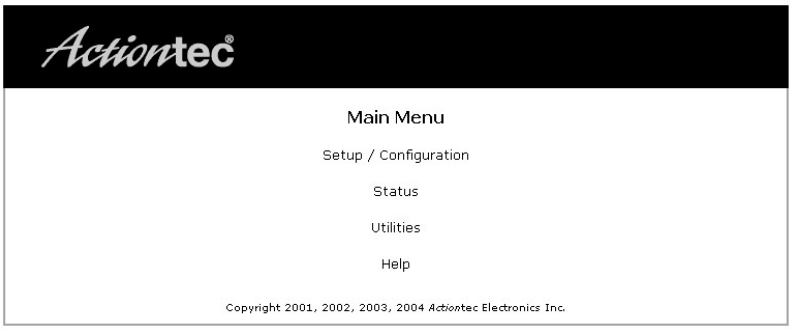
☞ ***Note:*** If you already set up the Router using the Installation Buddy (as described in Chapter 2, "Setting Up the Router," on page 7), the settings described in this section have already been configured.

1. Open a Web browser. In the "Address" text box, type

`http://192.168.0.1`

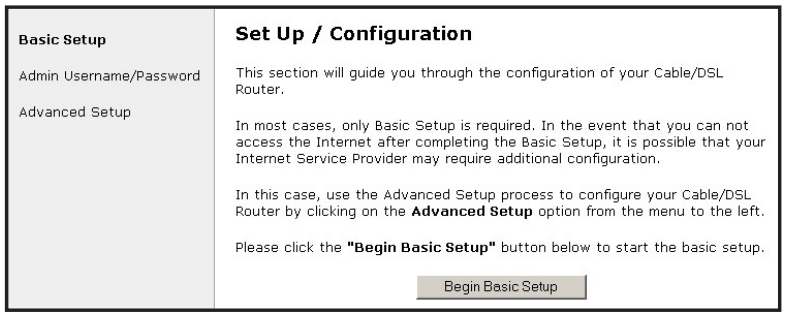
then press **Enter** on the keyboard.

2. The "Main Menu" screen appears. Select **Setup/Configuration**.

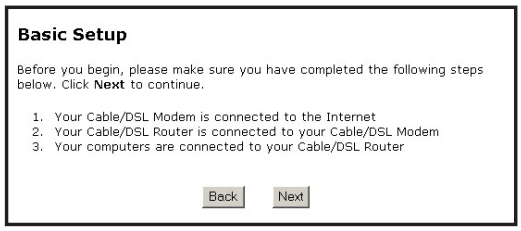


Downloaded from www.Manualslib.com manuals search engine

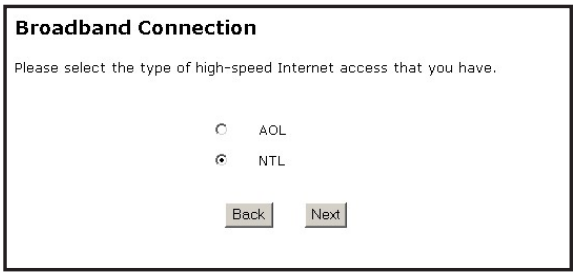
3. Follow the instructions in the "Set Up/Configuration" screen, then click **Begin Basic Setup**.


Basic Setup
Admin Username/Password
Advanced Setup
Set Up / Configuration
This section will guide you through the configuration of your Cable/DSL Router.
In most cases, only Basic Setup is required. In the event that you can not access the Internet after completing the Basic Setup, it is possible that your Internet Service Provider may require additional configuration.
In this case, use the Advanced Setup process to configure your Cable/DSL Router by clicking on the Advanced Setup option from the menu to the left.
Please click the "Begin Basic Setup" button below to start the basic setup.
Begin Basic Setup

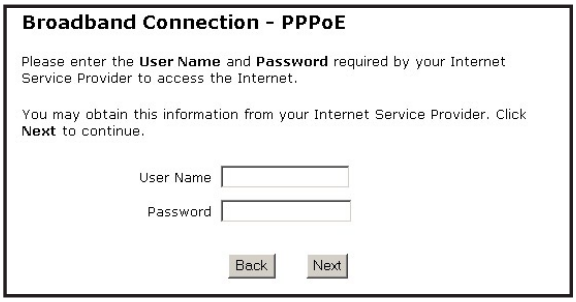
4. In the next screen, follow the onscreen instructions, then click **Next**.


Basic Setup
Before you begin, please make sure you have completed the following steps below. Click Next to continue.
1. Your Cable/DSL Modem is connected to the Internet
2. Your Cable/DSL Router is connected to your Cable/DSL Modem
3. Your computers are connected to your Cable/DSL Router
Back
Next

5. In the next screen, select the ISP used to connect the Router to the Internet (**AOL** or **NTL**), then click **Next**.

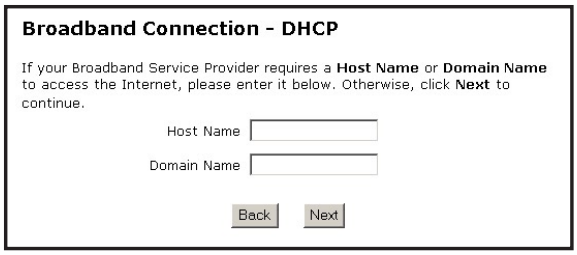


6. If **AOL** was selected in step 5, enter the **User Name** and **Password** provided by the ISP in the "Broadband Connection - PPPoE" screen. If AOL provided a static IP address, enter it in the **Static IP** text box. If not, leave it blank. Click **Next** and go directly to step 8.


Broadband Connection - PPPoE
Please enter the User Name and Password required by your Internet Service Provider to access the Internet.
You may obtain this information from your Internet Service Provider. Click Next to continue.
User Name
Password
Back
Next

Downloaded from www.Manualslib.com manuals search engine

7. If **NTL** was selected in step 5, enter the **Host Name** and **Domain Name** provided by the ISP in the "Cable Broadband Connection - DHCP" screen. If NTL provided a static IP address, enter it in the **Static IP** text box. If not, leave the text boxes blank. Click **Next**.


Broadband Connection - DHCP
If your Broadband Service Provider requires a Host Name or Domain Name to access the Internet, please enter it below. Otherwise, click Next to continue.
Host Name
Domain Name
Back
Next

8. Click **Save and Restart** in the "Save and Restart" screen.

Save and Restart
Please click the Save and Restart button below to save your settings and restart your Cable/DSL Router.
Save and Restart

9. The "Congratulations" screen appears. The Router is successfully configured.

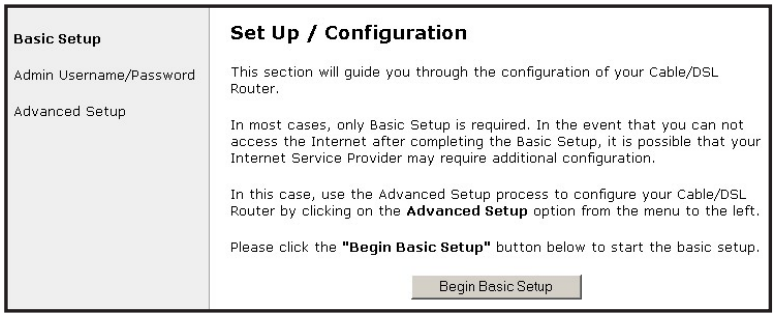
The Power light flashes rapidly while the Router restarts, then glows steadily green when fully operational. The Internet light will also glow steadily green. The Router is now configured and users can start surfing the Web.
If an error stating the Web browser was unable to connect to the Internet appears, check the configuration settings. Ensure all the information required by the ISP is entered correctly.

Downloaded from www.Manualslib.com manuals search engine

Changing the User Name and Password

To create or change the user name and password, allowing access to the Router's Web Configuration screens, follow these instructions:

1. From the Setup/Configuration screen, select **Change Admin Password** from the menu on the left side.


Basic Setup
Admin Username/Password
Advanced Setup
Set Up / Configuration
This section will guide you through the configuration of your Cable/DSL Router.
In most cases, only Basic Setup is required. In the event that you can not access the Internet after completing the Basic Setup, it is possible that your Internet Service Provider may require additional configuration.
In this case, use the Advanced Setup process to configure your Cable/DSL Router by clicking on the Advanced Setup option from the menu to the left.
Please click the "Begin Basic Setup" button below to start the basic setup.
Begin Basic Setup

2. The "Change Admin Username/Password" screen appears. Enter a new user name (optional) in the "New Username" text box, then a password in the "New Password" text box. Re-enter the password in the "Re-enter New Password" text box. Make sure to write the user name and password down and keep them in a secure location. They will be needed to access to the Router's Web Configurations screens in the future.

Change Admin Username/Password
New Username
admin
New Password
Re-enter New Password
Please click the Save and Restart button below to save your settings and restart your Cable/DSL Router.
Save and Restart

3. Click "Save and Restart" at the bottom of the screen.

4. The "Save and Restart" page appears. Click "Save and Restart" to save the settings changed in the Change Admin Username/Password screen.

Save and Restart
Please click the Save and Restart button below to save your settings and restart your Cable/DSL Router.
Save and Restart

Once the Router has rebooted, the password is active. To access the Router's Web Configuration screens, the user name and password must be entered.

Downloaded from www.Manualslib.com manuals search engine

Using Advanced Setup

4

This chapter contains information concerning accessing and using the advanced features of the Router, such as wireless settings, remote management, Web site blocking, and dynamic routing.

Accessing Advanced Setup

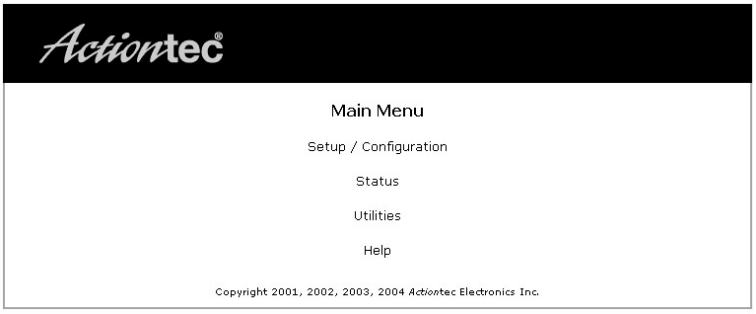
To access the Advanced Settings screens:

1. Open a Web browser. In the "Address" text box type:

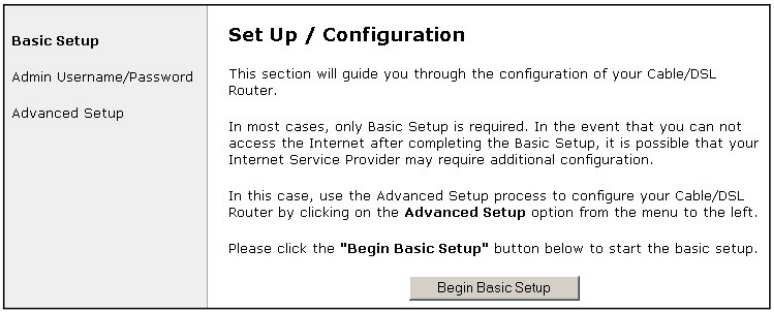
   `http://192.168.0.1`

   then press **Enter** on the keyboard.

2. The "Main Menu" screen appears. Select **Setup/Configuration**.

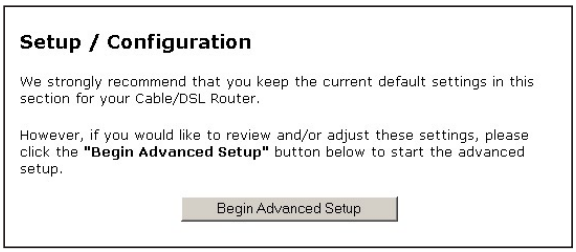


3. In the "Set Up/Configuration" screen, read the instructions, then select **Advanced Setup** from the menu on the left side.

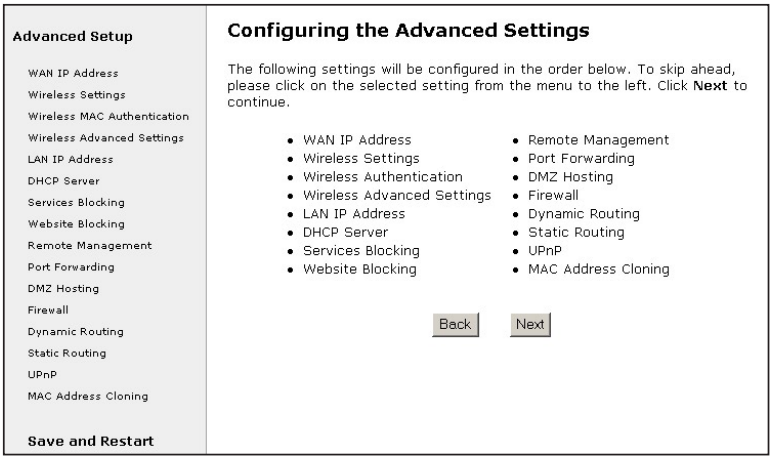

Basic Setup
Admin Username/Password
Advanced Setup
Set Up / Configuration
This section will guide you through the configuration of your Cable/DSL Router.
In most cases, only Basic Setup is required. In the event that you can not access the Internet after completing the Basic Setup, it is possible that your Internet Service Provider may require additional configuration.
In this case, use the Advanced Setup process to configure your Cable/DSL Router by clicking on the Advanced Setup option from the menu to the left.
Please click the "Begin Basic Setup" button below to start the basic setup.
Begin Basic Setup

Downloaded from www.Manualslib.com manuals search engine

4. In the next screen, read the recommendations. To access the advanced settings of the Router, click **Begin Advanced Setup**.


Setup / Configuration
We strongly recommend that you keep the current default settings in this section for your Cable/DSL Router.
However, if you would like to review and/or adjust these settings, please click the "Begin Advanced Setup" button below to start the advanced setup.
Begin Advanced Setup

5. The "Configuring the Advanced Settings" screen appears. To check all the settings, or if unsure of which settings to modify, select **Next**. To modify a specific configuration, click on its name in the menu bar on the left.



☞ ***Note***: To save changes made in any of the Advanced Settings screens, click **Save and Restart** at the bottom of the gray menu on the left side of the screen.

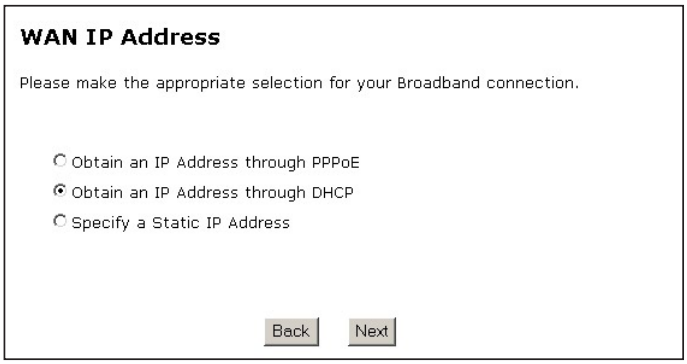
Downloaded from www.Manualslib.com manuals search engine

WAN IP Address

Selecting **WAN IP Address** in the "Configuring the Advanced Settings" screen generates the "WAN IP Address" screen. WAN IP Address allows manual set up of the IP address of the Router. There are three ways to do this: **Obtain an IP Address through PPPoE**, **Obtain an IP Address through DHCP**, or **Specify a Static IP Address**.

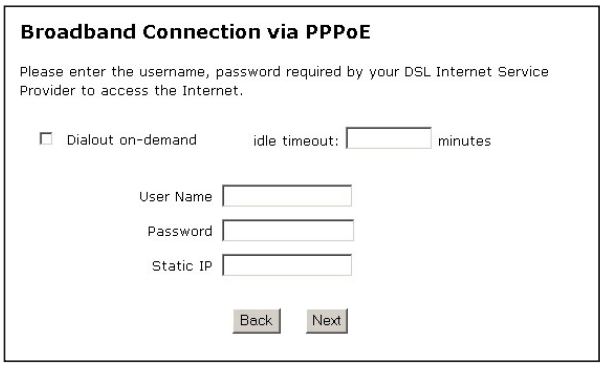
> ***Note***: Some DSL providers use PPPoE to establish communication with an end user. Other types of broadband Internet connections (such as fixed point wireless) may use either DHCP or Static IP address. If unsure about which connection is present, check with the ISP before continuing.

After selecting a connection type, click **Next** to continue configuring the connection.


WAN IP Address
Please make the appropriate selection for your Broadband connection.
Obtain an IP Address through PPPoE
Obtain an IP Address through DHCP
Specify a Static IP Address
Back
Next

Obtain an IP Address through PPPoE

Select this option to allow the Router to use the Point-to-Point over Ethernet (PPPoE) protocol.



Downloaded from www.Manualslib.com manuals search engine

If a **User Name**, **Password** and/or **Static IP** was entered in the Installation Buddy or during Basic Setup, it should be displayed in the "Broadband Connection via PPPoE" screen. If not, enter the information now. If the information is unavailable, contact the ISP.

Dialout on-demand/Idle timeout

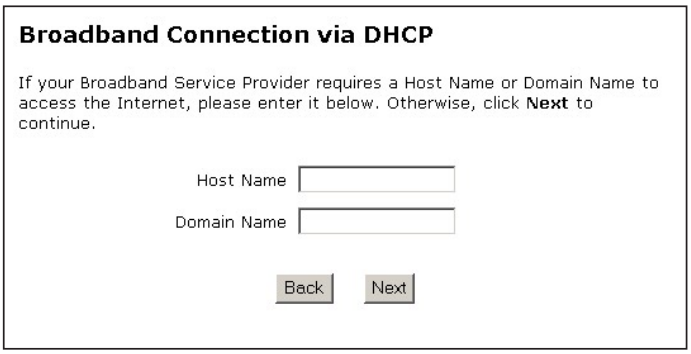
To have the Router automatically connect to the Internet whenever needed (when a Web browser is opened, for example), activate "Dialout on-demand" by clicking in the appropriate check box.
When Dialout on-demand is activated, the user can also set the Router to disconnect from the Internet after a certain amount of idle time (no Internet activity). To do this, enter the number of idle time minutes (minimum 2 minutes) before disconnection occurs in the text box before "Minutes."

Obtain an IP Through DHCP

Select this option if the IP service is configured to use RFC 1483 Bridged or Routed (used for configurations without a Static IP assigned by an ISP). In this mode, the Router will query the ISP to receive the IP address and routing information, which will terminate at the Router, as opposed to the IP address and routing information being bridged to terminate at the computer. This allows the use of the router capabilities for the Local Area Network (LAN).

Some ISPs need to authenticate their end users with a **Host Name** and/or **Domain Name**. If this is the case, check with the ISP for a host name and domain name and enter them in the appropriate text boxes in the "Broadband Connection via DHCP" screen. If the ISP does not require these settings, leave the text boxes blank.

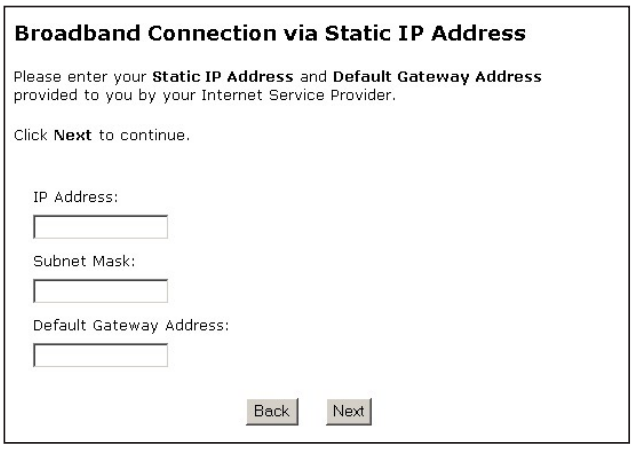
☞ ***Note***: Contact the ISP if unsure of the proper configuration.


Broadband Connection via DHCP
If your Broadband Service Provider requires a Host Name or Domain Name to access the Internet, please enter it below. Otherwise, click Next to continue.
Host Name
Domain Name
Back
Next

Downloaded from www.Manualslib.com manuals search engine

Specify a Static IP Address

Select this option if the ISP service is configured to use RFC 1483 Bridged or Routed using a Static IP Address. Enter the **IP Address**, **Subnet Mask**, and **Default Router Address** provided by the ISP in the "Broadband Connection via Static IP Address" screen, which causes the IP address and routing information to terminate at the Router, as opposed to the IP address and routing information being bridged to terminate at the computer. This allows the use of the router capabilities for the Local Area Network (LAN).

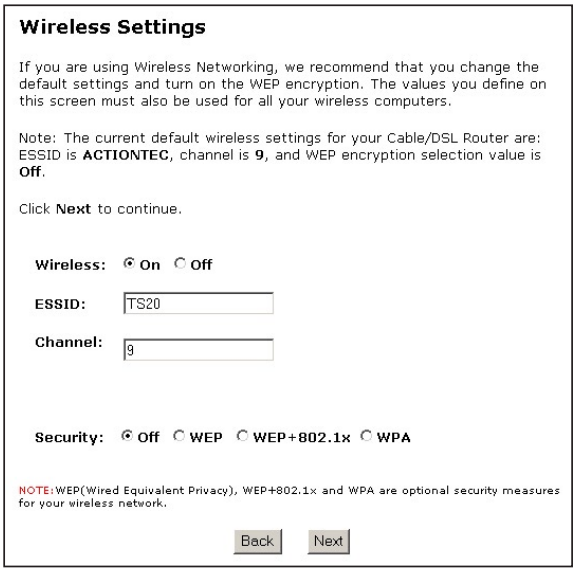

Broadband Connection via Static IP Address
Please enter your Static IP Address and Default Gateway Address provided to you by your Internet Service Provider.
Click Next to continue.
IP Address:
Subnet Mask:
Default Gateway Address:
Back
Next

☞ ***Note***: Contact the ISP if unsure of the proper configuration.

Downloaded from www.Manualslib.com manuals search engine

Wireless Settings

Selecting **Wireless Settings** in the "Configuring the Advanced Settings" screen generates the "Wireless Settings" screen.


Wireless Settings
If you are using Wireless Networking, we recommend that you change the default settings and turn on the WEP encryption. The values you define on this screen must also be used for all your wireless computers.
Note: The current default wireless settings for your Cable/DSL Router are: ESSID is ACTIONTEC, channel is 9, and WEP encryption selection value is Off.
Click Next to continue.
Wireless: On Off
ESSID: TS20
Channel: 9
Security: Off WEP WEP+802.1x WPA
NOTE:WEP(Wired Equivalent Privacy), WEP+802.1x and WPA are optional security measures for your wireless network.
Back
Next

Wireless

To activate the wireless radio, click in the circle next to **On**. To turn off the wireless radio, click in the circle next to **Off**.

ESSID

ESSID is the network name assigned to the wireless network. The factory default setting is "ACTIONTEC." Although *Action*tec recommends keeping the default value intact, the ESSID value can be modified, using any combination of alphanumeric characters (i.e., A-Z, a-z, 0-9). All wireless-capable computers included on the Router's wireless network must have this same ESSID value. (For the *Action*tec 802.11b Wireless PC Card, the ESSID value must be the same as the SSID value.)

Channel

Channel assigns the frequency band at which the Router communicates. The factory default value is set to channel 9.

Downloaded from www.Manualslib.com manuals search engine

Security

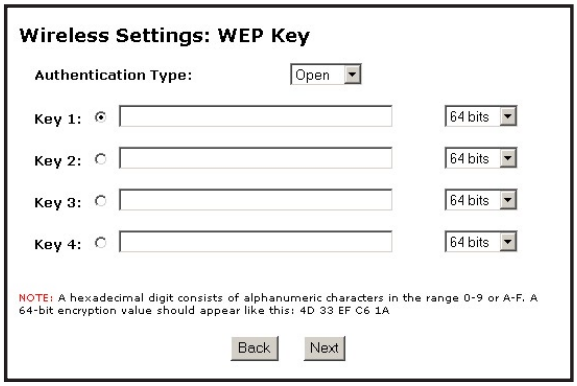
There are four wireless security options: Off, WEP, WEP+802.1x, and WPA. The latter three options are different types of wireless security.

Off

Selecting **Off** disables wireless security. Selecting this option allows any computer with wireless capability and the correct ESSID value to join the wireless network.

WEP

Selecting the security option "WEP" and clicking **Next** in the Wireless Settings screen generates the "WEP Key" screen. Here, the authentication type, encryption level, and WEP keys are entered to activate WEP (**W**ired **E**quivalent **P**rivacy) security encryption for the wireless network.



Authentication Type - There are three authentication types: Open, Shared, and Both. Open authentication allows any wireless-enabled device to recognize the Router, if the correct WEP key is enabled on the device. Shared allows only wireless-enabled devices with the correct WEP key and Shared key to recognize the Router. Selecting Both enables both Open and Shared authentication types.

64-bit WEP - 64-bit WEP requires four separate keys. Each key comprises five hexadecimal digit pairs. A hexadecimal digit consists of an alphanumeric character ranging from 0-9 or A-F. An example of a 64-bit WEP key is: 4E-A3-3D-68-72. To create a set of 64-bit WEP keys, activate all four keys by clicking in the appropriate circles, then enter five hexadecimal digit pairs in each **Key** text box (**Key 1-**, **Key 2-**, **Key 3-**, **Key 4-**). After activating 64-bit WEP on the Router, a computer with wireless capability can join the network only if these same keys are entered in the computer's wireless encryption scheme.

Downloaded from www.Manualslib.com manuals search engine

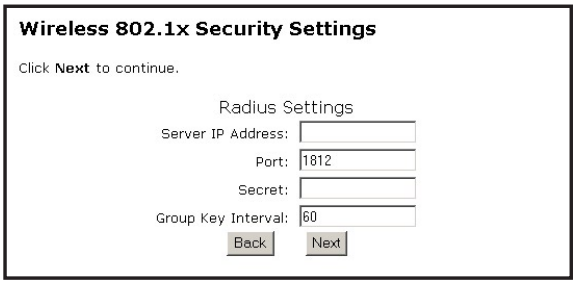
128-bit WEP - 128-bit WEP requires one or more keys, comprising 13 hexadecimal pairs. A hexadecimal digit consists of alphanumeric characters ranging from 0-9 or A-F. An example of a 128-bit WEP key is: 3D-44-FE-6C-A1-EF-2E-D3-C4-21-74-5D-B1. To create a 128-bit WEP key, activate **Key 1** by clicking in the appropriate circle, then enter 13 hexadecimal digit pairs in the **Key** text box. After activating 128-bit WEP on the Router, a computer with wireless capability can join the network only if this key is entered in the computer's wireless encryption scheme.

256-bit WEP - 256-bit WEP requires one or more keys, comprising 29 hexadecimal pairs. A hexadecimal digit consists of alphanumeric characters ranging from 0-9 or A-F. To create a 256-bit WEP key, activate **Key 1** by clicking in the appropriate circle, then enter 29 hexadecimal digit pairs in the **Key** text box. After activating 256-bit WEP on the Router, a computer with wireless capability can join the network only if this key is entered in the computer's wireless encryption scheme.

☞ ***Note***: Not all wireless PC Cards support 128- or 256-bit WEP. Ensure that all PC Cards installed in the networked computers support 128- or 256-bit WEP before activating.

WEP+802.1x

Activating **WEP+802.1x** and clicking **Next** in the Wireless Settings screen generates the "Wireless 802.1x Security Settings" screen. This setting is for enterprise networks only, and should be accessed by experienced information systems specialists only.

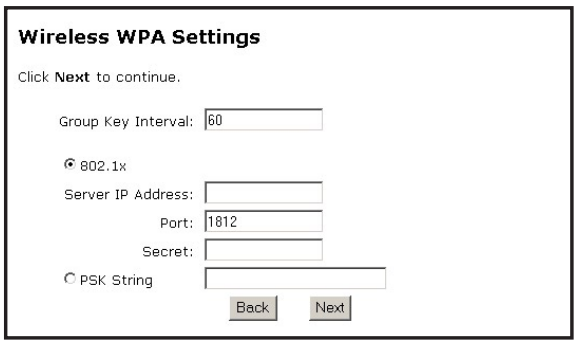


To set up WEP+802.1x security, enter the IP address of the RADIUS server in the "Server IP Address" text box, and the "Secret" key (for communication between the RADIUS server and the Router) in the "Secret" text box. The "Port" and "Group Key Interval" values should remain the same

Downloaded from www.Manualslib.com manuals search engine

WPA

Activating **WPA** (Wi-Fi **P**rotected **A**ccess) and clicking **Next** in the Wireless Settings screen generates the "Wireless WPA Settings" screen.

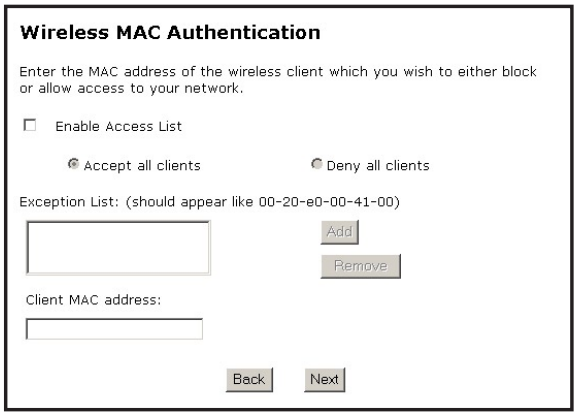


There are two levels of WPA. The "Group Key Interval," "Server IP Address," "Port," and "Secret" text boxes, along with the "802.1x" radio button, are enterprise network specific, and should only be accessed by an experienced information systems professional. See "WEP+802.1x" on the previous page for more information.

"PSK String" is for home network security. To set up a PSK (**P**re-**S**hared **K**ey), click in the circle next to **PSK String**, then enter at least eight alphanumeric characters in the text box. All wireless-enabled devices must support WPA and know the PSK to join the network.

Wireless MAC Authentication

Selecting **Wireless MAC Authentication** in the "Configuring the Advanced Settings" screen generates the "Wireless MAC Authentication" screen.


Wireless MAC Authentication
Enter the MAC address of the wireless client which you wish to either block or allow access to your network.
Enable Access List
Accept all clients
Deny all clients
Exception List: (should appear like 00-20-e0-00-41-00)
Add
Remove
Client MAC address:
Back
Next

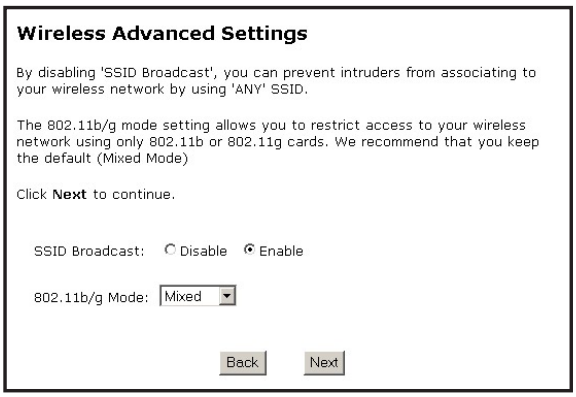
Downloaded from www.Manualslib.com manuals search engine

This feature allows the user to control access to the wireless LAN network by denying or allowing wireless client(s) to join the network based on their MAC address.

After changing settings, click Next or Back to continue, or Save and Restart to make all changes permanent.

Wireless Advanced Settings

Selecting **Wireless Advanced Settings** in the "Configuring the Advanced Settings" screen generates the "Wireless Advanced Settings" screen.


Wireless Advanced Settings
By disabling 'SSID Broadcast', you can prevent intruders from associating to your wireless network by using 'ANY' SSID.
The 802.11b/g mode setting allows you to restrict access to your wireless network using only 802.11b or 802.11g cards. We recommend that you keep the default (Mixed Mode)
Click Next to continue.
SSID Broadcast: Disable Enable
802.11b/g Mode: Mixed
Back
Next

SSID Broadcast

To prevent unknown users from associating with the Router's network (by using "ANY" as an SSID, for example), disable the Router's SSID broadcast by clicking in the circle next to "Disable."

802.11b/g Mode

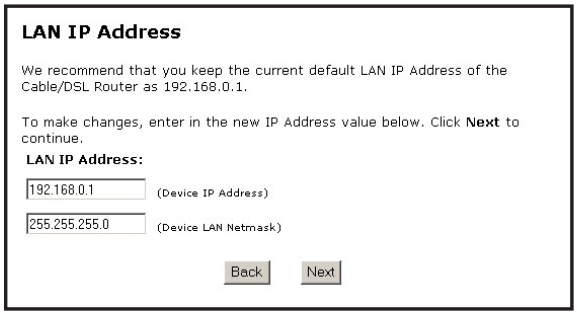
Access to the Router's network can be restricted to wireless clients using either the 802.11b or 802.11g wireless adapters. Click on the down arrow next to the text box and select the desired option. *Action*tec recommends using the "Mixed" mode (the default option), which enables both 802.11b and 802.11g wireless clients to join the network.

After changing settings, click Next or Back to continue, or Save and Restart to make all changes permanent.

Downloaded from www.Manualslib.com manuals search engine

LAN IP Address

Selecting **LAN IP Address** in the "Configuring the Advanced Settings" screen generates the "LAN IP Address" screen.


LAN IP Address
We recommend that you keep the current default LAN IP Address of the Cable/DSL Router as 192.168.0.1.
To make changes, enter in the new IP Address value below. Click Next to continue.
LAN IP Address:
192.168.0.1
(Device IP Address)
255.255.255.0
(Device LAN Netmask)
Back
Next

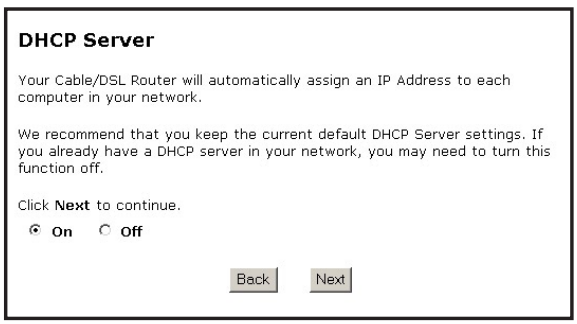
The values in the "LAN IP Address" and "Netmask" text boxes are the IP address and Subnet mask of the Router as seen on the network. These values can be modified for your LAN network, but *Action*tec recommends keeping the default factory settings (IP address 192.168.0.1; Subnet mask 255.255.255.0).

☞ ***Note***: If the Router's LAN IP Address is modified, ensure the DHCP Server range is within the same subnet. For more information, see "DHCP Server Configuration."

After changing settings, click Next or Back to continue, or Save and Restart to make all changes permanent.

DHCP Server

Selecting **DHCP Server** in the "Configuring the Advanced Settings" screen generates the "DHCP Server" screen. The Router has a built-in DHCP (**D**ynamic **H**ost **C**onfiguration **P**rotocol) server that automatically assigns a different IP address to each computer on the network, eliminating IP address conflicts.
The factory default setting is **On**. To disable the DHCP Server, select **Off**.

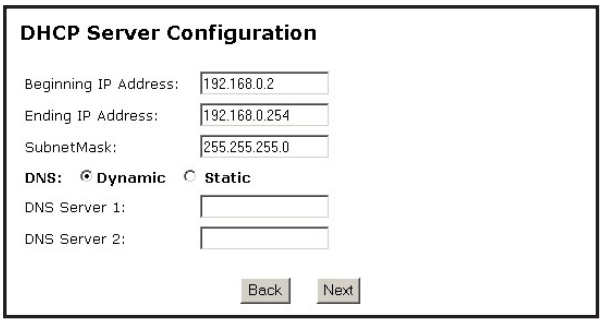

DHCP Server
Your Cable/DSL Router will automatically assign an IP Address to each computer in your network.
We recommend that you keep the current default DHCP Server settings. If you already have a DHCP server in your network, you may need to turn this function off.
Click Next to continue.
On
Off
Back
Next

Downloaded from www.Manualslib.com manuals search engine

*Action*tec strongly recommends leaving the DHCP Server option **On**. If the DHCP Server option is **Off**, ensure the IP addresses of the networked computers are on the same subnet as the IP address of the Router. For more information, see "DHCP Server Configuration."

DHCP Server Configuration

Clicking **Next** in the "DHCP Server" screen (if the DHCP server is activated) generates the "DHCP Server Configuration" screen. Change IP address range and DNS server information here.



Beginning IP Address

The "Beginning IP Address" is the IP address at which the DHCP server starts assigning IP addresses. *Action*tec recommends keeping the factory default setting (192.168.0.2).

Ending IP Address

The "Ending IP Address" is the IP Address at which the DHCP Server stops assigning IP addresses. Actiontec recommends keeping the factory default settings (192.168.0.254).

The beginning and ending IP addresses define the IP address range of the Router. If the default values are left intact, the Router supplies a unique IP address between 192.168.0.2 and 192.168.0.254 to each computer on the network. Note that the first three groups of numbers of the addresses are identical; this means they are on the same subnet. The IP address of the Router must be on the same subnet as the IP address range it generates. For instance, if the Router's IP address is changed to 10.33.222.1, set the beginning IP address to 10.33.222.2, and the ending IP address to 10.33.222.254.

Downloaded from www.Manualslib.com manuals search engine

DNS (Dynamic or Static)

These options designate the type of DNS server provided by the ISP. If the ISP provided DNS server information, select the type here. If not, leave as is.

DNS Server 1

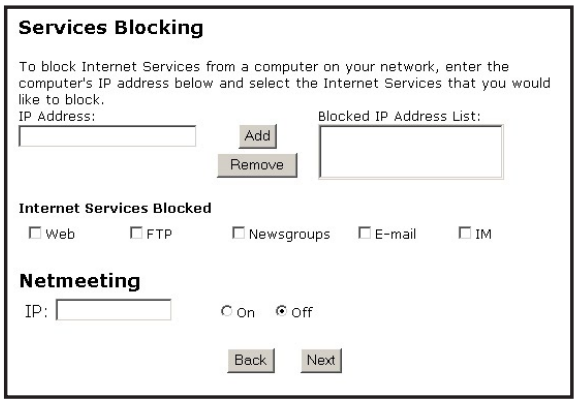
"DNS Server 1" is the primary DNS server provided by the ISP. If the ISP provided DNS server information, enter it here. If not, leave the text box intact.

DNS Server 2

"DNS Server 2" is the secondary DNS provided by the ISP. If the ISP provided secondary DNS server information, enter it here. If not, leave the text box intact.

Services Blocking

Selecting **Services Blocking** in the "Configuring the Advanced Settings" screen generates the "Services Blocking" screen.



To modify Internet privileges (Web, FTP, Newsgroups, etc.) for the computers on the network:

1. Enter the computer's IP address in the **IP Address:** text box.
2. Select the Internet service(s) to be blocked.
3. Click **Add** to enter the computer's IP address in the "Blocked IP Address List" text box.
4. To remove blocked services, select the computer's IP address in the "Blocked IP Address List" text box and click **Remove**.

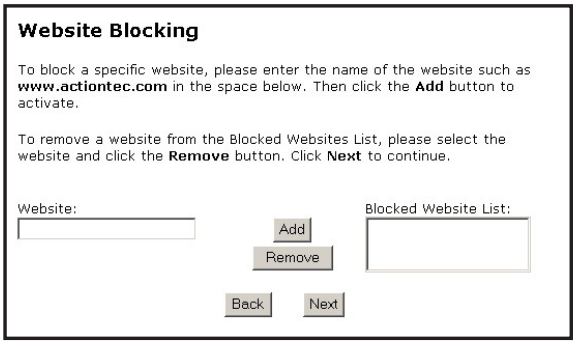
Downloaded from www.Manualslib.com manuals search engine

Netmeeting

If a computer on the network uses Netmeeting, enable Netmeeting, by clicking the circle next to "On" and entering the IP address of the computer. Click **Next**, then click **Save and Restart** to apply the settings. If Netmeeting is not needed, click the circle next to "Off."

Website Blocking

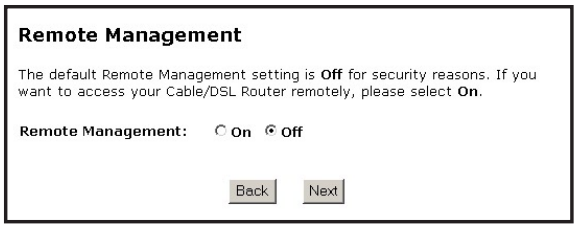
Selecting **Website Blocking** in the "Configuring the Advanced Settings" screen generates the "Website Blocking" screen. This feature enables the Router to block Web sites to all computers on the network. To block a Web site, enter the address of the Web site in the "Website" text box and click **Add**. The blocked Web site address is displayed in the "Blocked Website List" text box, and will not be available to computers on the network. To remove a blocked Web site, click on it in the "Blocked Website List," then click **Remove**.


Website Blocking
To block a specific website, please enter the name of the website such as www.actiontec.com in the space below. Then click the Add button to activate.
To remove a website from the Blocked Websites List, please select the website and click the Remove button. Click Next to continue.
Website:
Add
Remove
Blocked Website List:
Back
Next

Downloaded from www.Manualslib.com manuals search engine

Remote Management

Selecting **Remote Management** in the "Configuring the Advanced Settings" screen generates the "Remote Management" screen. Remote Management allows access to the Router through the Internet via another computer. *Action*tec recommends leaving the Remote Management **Off** (the factory default setting).


Remote Management
The default Remote Management setting is Off for security reasons. If you want to access your Cable/DSL Router remotely, please select On.
Remote Management:
On
Off
Back
Next

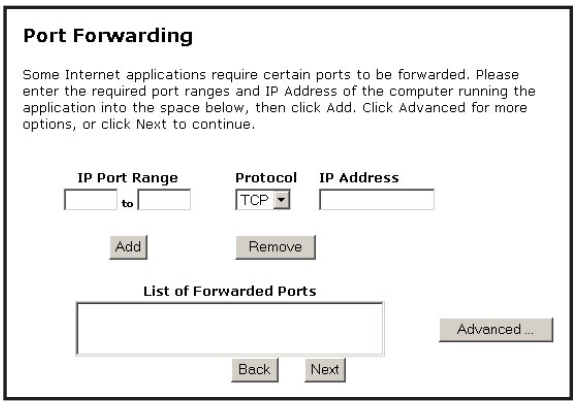
To access the Router from the Internet, activate Remote Management by selecting **On** and writing down the WAN IP address of the Router (see "WAN IP Address" on page 29). On a computer outside of the network, open a Web browser and enter the Router's WAN IP address in the address text box. The Router's Main Menu (or a password prompt, if a password has been set) appears in the browser window.

☞ ***Note***: Before Remote Management can be activated, the administrator password must be set. To do this, go to the Setup screen and select Change Admin Password. Follow the instructions in the subsequent screens.

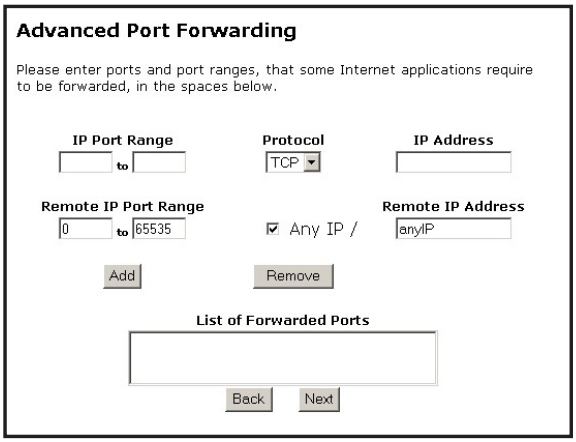
Downloaded from www.Manualslib.com manuals search engine

Port Forwarding

Selecting **Port Forwarding** in the "Configuring the Advanced Settings" screen generates the "Port Forwarding" screen. Port forwarding allows certain programs to bypass the Router's built-in firewall, allowing access to parts of the network (for hosting a Web or FTP server, for example). To use port forwarding, enter the IP port range in the "IP Port Range" text boxes. (If more than 10 ports are needed, *Action*tec recommends using DMZ Hosting. See "DMZ Hosting," below, for more information.) Choose the protocol type from the "Protocol" list box, then enter the IP address of the computer on the network to be used as a host. Click **Add**. The forwarded ports appear in the "List of Forwarded Ports" text box.
To remove forwarded ports, highlight them, then click **Remove**.


Port Forwarding
Some Internet applications require certain ports to be forwarded. Please enter the required port ranges and IP Address of the computer running the application into the space below, then click Add. Click Advanced for more options, or click Next to continue.
IP Port Range
to
Protocol
TCP
IP Address
Add
Remove
List of Forwarded Ports
Advanced ...
Back
Next

Clicking **Advanced** brings up the "Advanced Port Forwarding" screen.

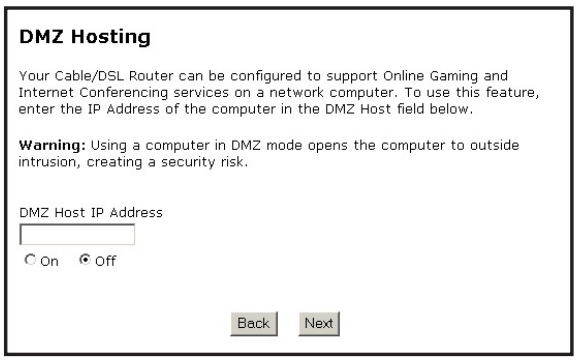


Downloaded from www.Manualslib.com manuals search engine

In this screen, the user can allow only certain IP addresses to access forwarded ports. Enter the port range of the forwarded ports in the "Remote IP Port Range" text boxes, enter the IP address to be allowed access in the "Remote IP Address" text box, then click "Add." The active forwarded ports will appear in the "List of Forwarded Ports" text box.
To deactivate a forwarded port, select it from the "List of Forwarded Ports" text box, then click "Remove."

DMZ Hosting

Selecting **DMZ Hosting** in the "Configuring the Advanced Settings" screen generates the "DMZ Hosting" screen. To use DMZ hosting, enter the IP address of the computer on the network to be used as a DMZ host in the "DMZ Host IP Address" text box, then click **On**.


DMZ Hosting
Your Cable/DSL Router can be configured to support Online Gaming and Internet Conferencing services on a network computer. To use this feature, enter the IP Address of the computer in the DMZ Host field below.
Warning: Using a computer in DMZ mode opens the computer to outside intrusion, creating a security risk.
DMZ Host IP Address
On
Off
Back
Next

DMZ hosting is used to support online gaming and Internet conferencing services. These programs usually require multiple open ports, making the network accessible from the Internet. DMZ hosting symbolically places the DMZ host computer outside of the Router's network. Access to the network resources while DMZ hosting is active is blocked. *Action*tec recommends activating DMZ hosting only as long as necessary.

Warning: The DMZ Host computer will be vulnerable to computer hackers on the Internet while in DMZ mode.

Downloaded from www.Manualslib.com manuals search engine

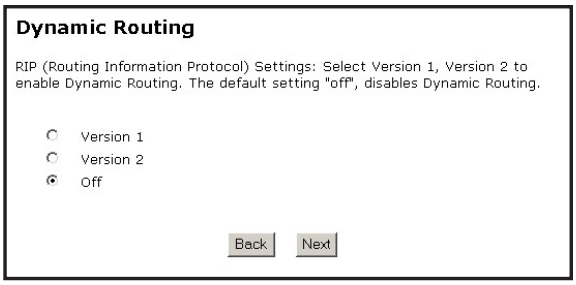
Firewall

Selecting **Firewall** in the "Configuring the Advanced Settings" screen generates the "Firewall Security Level" screen. Select the level of security needed for the network. See Appendix F on page 119 for details concerning each level of security.

Firewall Security Level
The default Firewall Security Level is set to "Basic". You can change the Firewall Security Level to suit your networking needs.
(Note: Once you have selected a security level, all IP traffic other than the policies specified will be blocked by the Firewall. Refer to the User Manual for detailed information on Firewall policies.)
High
Medium
Low
Basic
Back
Next

Dynamic Routing

Selecting **Dynamic Routing** in the "Configuring the Advanced Settings" screen generates the "Dynamic Routing" screen.

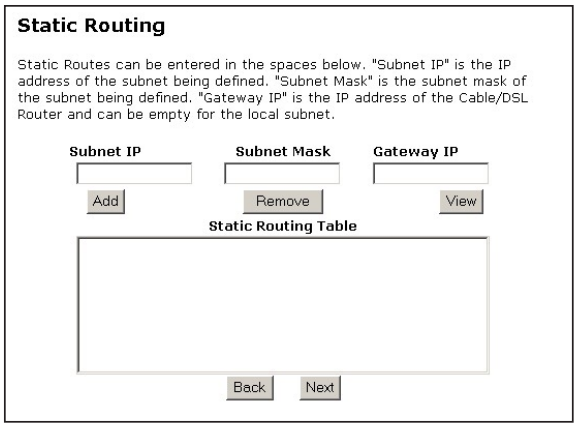

Dynamic Routing
RIP (Routing Information Protocol) Settings: Select Version 1, Version 2 to enable Dynamic Routing. The default setting "off", disables Dynamic Routing.
Version 1
Version 2
Off
Back
Next

If another router or gateway is set up behind the Router in the network configuration, consult the documentation that came with the other router/gateway to see what kind of Dynamic Routing is required to operate it with the Router, then select the appropriate option.

Downloaded from www.Manualslib.com manuals search engine

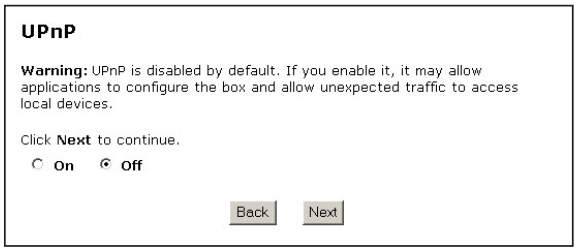
Static Routing

Selecting **Static Routing** in the "Advanced Settings" screen generates the "Static Routing" screen. Enter the addresses in their respective text boxes, then click **Add**. The address will appear in the "Static Routing Table." To remove an address, highlight it by clicking on it in the Static Routing Table, then click **Remove**.


Static Routing
Static Routes can be entered in the spaces below. "Subnet IP" is the IP address of the subnet being defined. "Subnet Mask" is the subnet mask of the subnet being defined. "Gateway IP" is the IP address of the Cable/DSL Router and can be empty for the local subnet.
Subnet IP
Subnet Mask
Gateway IP
Add
Remove
View
Static Routing Table
Back
Next

UPnP (Universal Plug and Play)

Selecting **UPnP** in the "Configuring the Advanced Settings" screen generates the "UPnP" screen. In this screen, the Universal Plug and Play option is turned on or off by activating the appropriate circle.


UPnP
Warning: UPnP is disabled by default. If you enable it, it may allow applications to configure the box and allow unexpected traffic to access local devices.
Click Next to continue.
On
Off
Back
Next

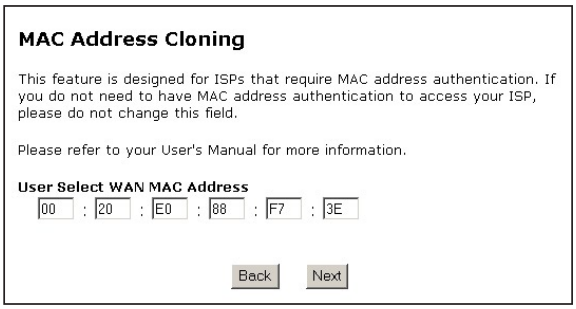
Universal Plug and Play is a zero-configuration networking protocol that allows hardware and software (such as Netmeeting) to operate more efficiently. If Netmeeting is not running properly, activate UPnP.

☞ ***Note***: Activating UPnP presents a slight security risk. After finishing with the hardware or software using UPnP, *Action*tec recommends deactivating UPnP.

Downloaded from www.Manualslib.com manuals search engine

MAC Address Cloning

Selecting **MAC Address Cloning** in the "Configuring the Advanced Settings" screen generates the "MAC Address Cloning" screen. A MAC (Media Access Control) address is an identifier unique to every networkable device, including the Router. Some ISPs require a MAC address to validate a computer's permission to be on their network. If the ISP requires this information, obtain the MAC address of the computer originally configured for the ISP, then enter the MAC address in the "User Select WAN MAC Address" text boxes in the MAC Address Cloning screen. The Router will now have a new MAC address.


MAC Address Cloning
This feature is designed for ISPs that require MAC address authentication. If you do not need to have MAC address authentication to access your ISP, please do not change this field.
Please refer to your User's Manual for more information.
User Select WAN MAC Address
00 : 20 : E0 : 88 : F7 : 3E
Back
Next

Downloaded from www.Manualslib.com manuals search engine

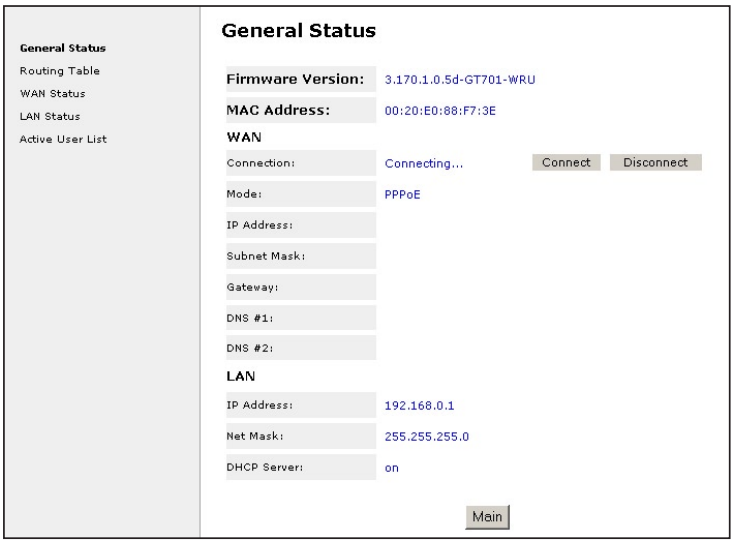
Viewing the Router's Settings

5

After configuring the Router, settings can be viewed by selecting **Status** in the Main Menu. In the left hand column, there are other Status options available: **Routing Table**, **WAN Status**, **LAN Status**, and **Active User List**.
No settings (other than connecting or disconnecting from the Internet) can be changed from the Current Status screen.

Status

Selecting "Status" from the Main Menu screen generates the "General Status" screen.



Firmware Version

Displays the firmware version the Router is currently running.

MAC Address

Displays the MAC (Media Access Control) address of the Router.

Downloaded from www.Manualslib.com manuals search engine

WAN - Connection

Displays the state of the connection to the ISP service (Connected or Disconnected).

WAN - Mode

Displays the type of connection used to communicate with the ISP.

WAN - IP Address

Displays the IP Address the ISP assigned to the Router.

WAN - Subnet Mask

Displays the Subnet Mask address the ISP assigned to the Router.

WAN - Router

Displays the Router address (for the IP Address and Subnet Mask) the ISP assigned to the Router.

WAN - DNS #1 & #2

Displays the Domain Name Server address(es) the ISP assigned to the Router.

LAN - IP Address

Displays the Local Area Network's (LAN) IP address.

LAN - Net Mask

Displays the Subnet Mask address configured for the LAN IP address.

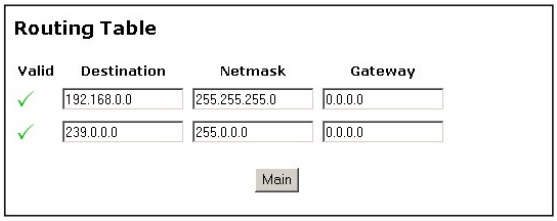
LAN - DHCP Server

Displays the state of the DHCP Server (On or Off).

Downloaded from www.Manualslib.com manuals search engine

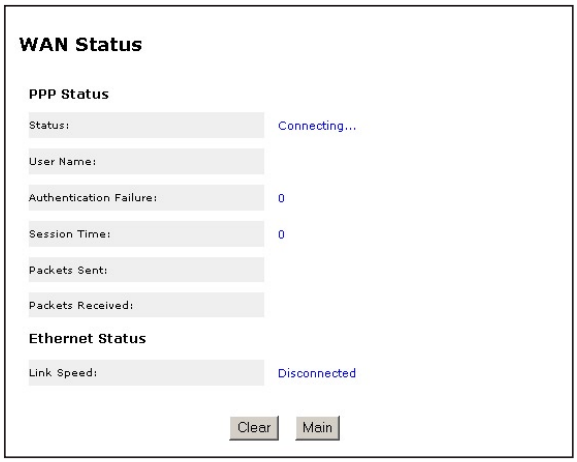
Routing Table

Selecting **Routing Table** generates the "Routing Table" screen. This screen displays on overview of the Router's routes.



WAN Status

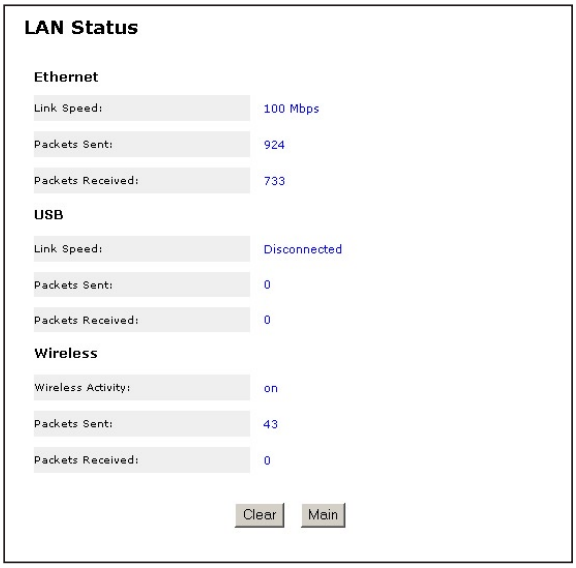
Selecting **WAN Status** in the Current Status screen generates the "WAN Status" screen. This screen displays on overview of the Router's WAN (Wide Area Network) connection.



Downloaded from www.Manualslib.com manuals search engine

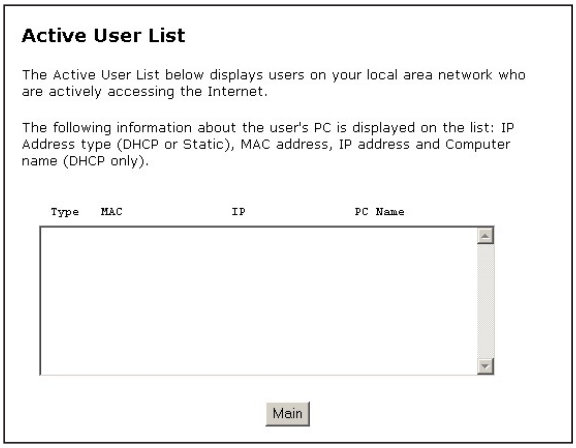
LAN Status

Selecting **LAN Status** generates the "LAN Status" screen. This screen displays on overview of the Router's LAN (Local Area Network) port connections.



Active User List

Selecting **Active User List** generates the "Active User List" screen. This screen displays a list of the users currently connected to the Router accessing the Internet with Network Address Translation (NAT) security activated.

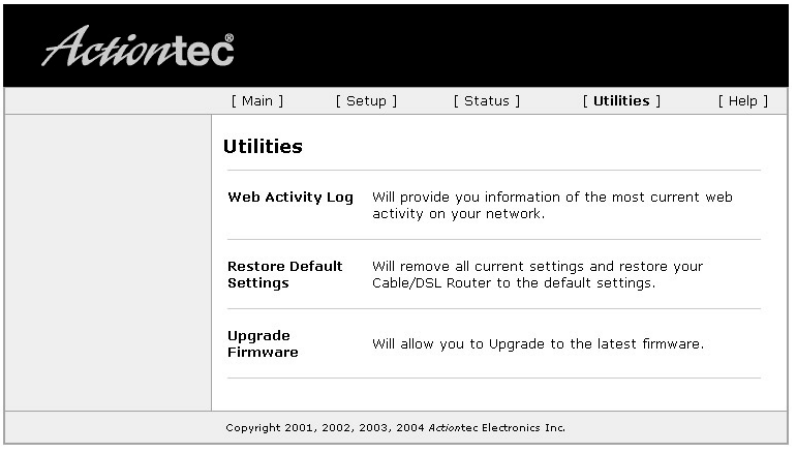

Active User List
The Active User List below displays users on your local area network who are actively accessing the Internet.
The following information about the user's PC is displayed on the list: IP Address type (DHCP or Static), MAC address, IP address and Computer name (DHCP only).
Type MAC IP PC Name
Main

Downloaded from www.Manualslib.com manuals search engine

Using Utilities

6

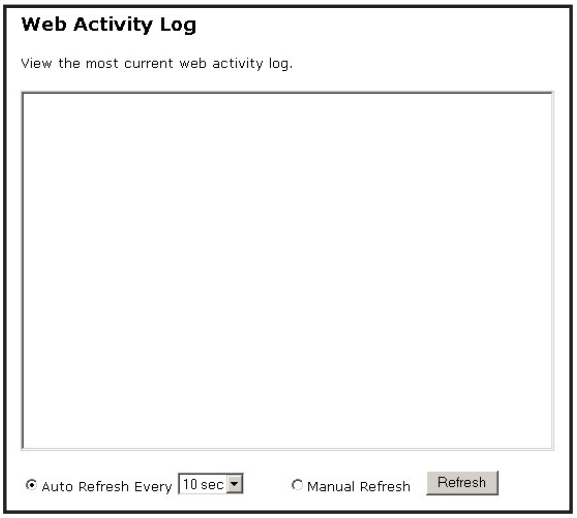
To access the Router's Web-based Utilities, select **Utilities** from the "Main Menu" screen. The "Utilities" screen appears.


Actiontec
[Main] [Setup] [Status] [Utilities] [Help]
Utilities
Web Activity Log
Will provide you information of the most current web activity on your network.
Restore Default Settings
Will remove all current settings and restore your Cable/DSL Router to the default settings.
Upgrade Firmware
Will allow you to Upgrade to the latest firmware.
Copyright 2001, 2002, 2003, 2004 Actiontec Electronics Inc.

From this screen, the Web activity log can be viewed, the DSL settings changed, the Router's factory default settings restored, and the Router's firmware upgraded.

Web Activity Log

The Web Activity Log provides information about the Web sites each computer on the Router's network has visited. To access the Web Activity Log, select **Web Activity Log** from the "Utilities" screen.



Downloaded from www.Manualslib.com manuals search engine

Auto Refresh

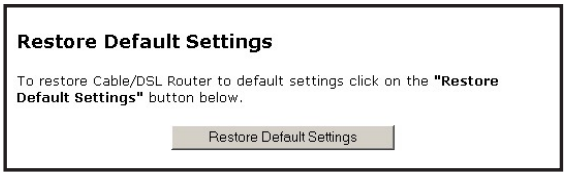
To set the Web Activity Log screen to automatically refresh at certain intervals, activate the circle next to "Auto Refresh Every" at the bottom of the Web Activity Log screen, then enter a time value (in seconds) in the text box, or click on the down arrow and select a time value from the menu that appears. The Web Activity Log will refresh at the chosen interval.

Manual Refresh

To set the Web Activity Log screen to manual refresh, activate the circle next to "Manual Refresh" at the bottom of the Web Activity Log screen. To refresh the Web Activity Log screen, click **Refresh**.

Restore Default Settings

To restore the Router to its factory default settings, select **Restore Default Settings** from the "Utilities" screen. When the "Restore Default Settings" screen appears, click **Restore Default Settings**. Any changes made to the Router's settings will be lost and the factory default settings will be restored. During this process, the Router's Power light flashes and the Router is disabled.


Restore Default Settings
To restore Cable/DSL Router to default settings click on the "Restore Default Settings" button below.
Restore Default Settings

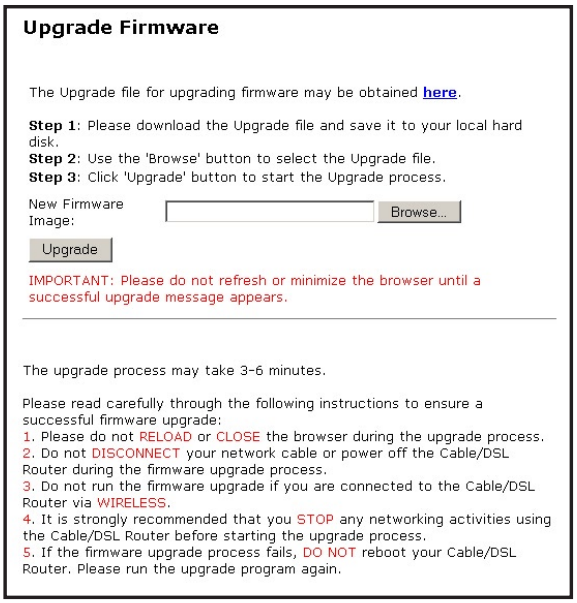
Warning: Do not unplug the power cord from the Router during the Restore Default Settings process. Doing so may result in permanent damage to the Router.

When the Power light stops flashing and glows steadily green, the Router is fully operational, and the default settings have been restored.

Downloaded from www.Manualslib.com manuals search engine

Upgrade Firmware

Selecting **Upgrade Firmware** in the "Utilities" screen generates the "Upgrade Firmware" screen. *Action*tec periodically posts firmware upgrades to enhance the capabilities and boost the performance of the Router. Follow the on-screen instructions to upgrade the Router's firmware.


Upgrade Firmware
The Upgrade file for upgrading firmware may be obtained here.
Step 1: Please download the Upgrade file and save it to your local hard disk.
Step 2: Use the 'Browse' button to select the Upgrade file.
Step 3: Click 'Upgrade' button to start the Upgrade process.
New Firmware Image:
Browse...
Upgrade
IMPORTANT: Please do not refresh or minimize the browser until a successful upgrade message appears.
The upgrade process may take 3-6 minutes.
Please read carefully through the following instructions to ensure a successful firmware upgrade:
1. Please do not RELOAD or CLOSE the browser during the upgrade process.
2. Do not DISCONNECT your network cable or power off the Cable/DSL Router during the firmware upgrade process.
3. Do not run the firmware upgrade if you are connected to the Cable/DSL Router via WIRELESS.
4. It is strongly recommended that you STOP any networking activities using the Cable/DSL Router before starting the upgrade process.
5. If the firmware upgrade process fails, DO NOT reboot your Cable/DSL Router. Please run the upgrade program again.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Setting Up a Network 7

Other computers can be connected to the Router to form a network, which allows the computers to transfer files, communicate with each other, and share an Internet connection. The networked computers can be connected to the Router in three ways: Ethernet, USB, or wirelessly.

Ethernet

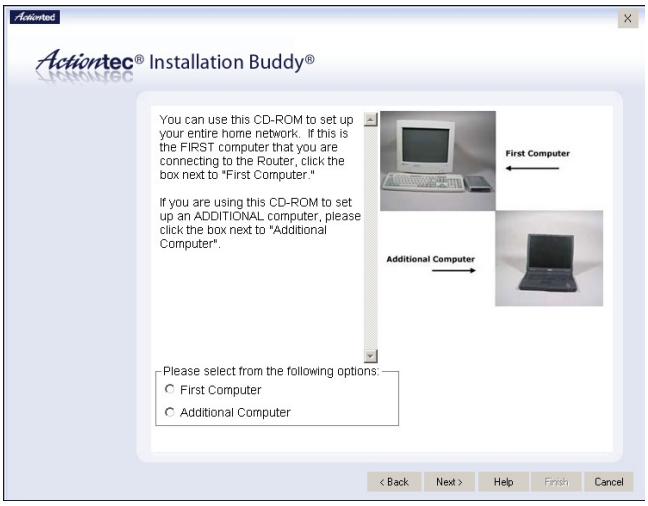
☞ ***Note***: An additional computer can be added to the Router's network via Ethernet only if the first computer was connected to the Router via USB (leaving the Router's Ethernet port free). If the first computer was connected to the Router via Ethernet, additional computers can be connected to the Router via USB or wirelessly.

1. Insert the Installation Buddy CD in the CD-ROM drive of the computer. The Installation Buddy starts automatically. Wait until the following screen appears, read the on-screen instructions, select the service provider by clicking in the appropriate circle, then click **Next**.

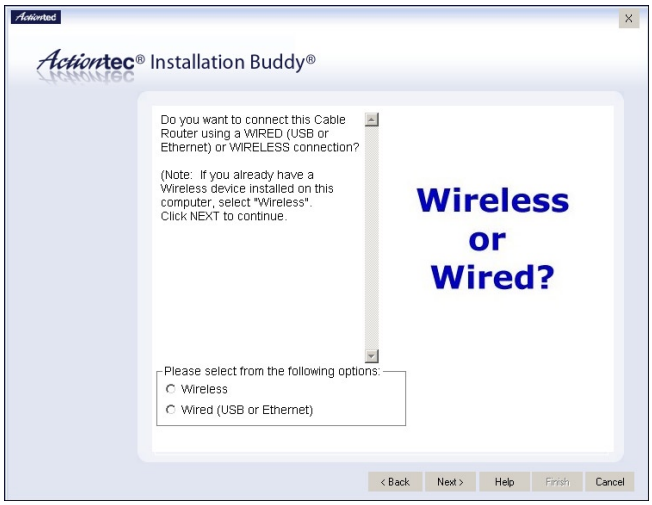
Actiontec® Installation Buddy®
Welcome to the Actiontec Installation Buddy for your Cable Broadband Connection !
This Installation Buddy will walk you through the easy steps to connect your Cable Router.
Click NEXT to begin the setup.
My Service Provider is:
AOL
NTL
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

2. Read the instructions, select **Addtional Computer** by clicking in the appropriate circle, then click **Next**.

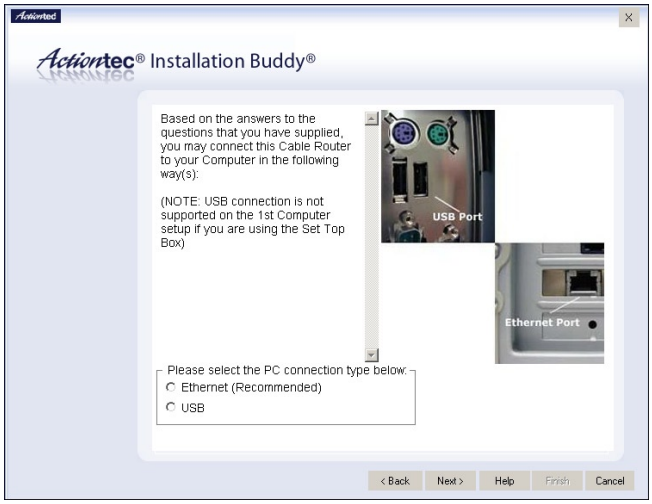

Actiontec® Installation Buddy®
You can use this CD-ROM to set up your entire home network. If this is the FIRST computer that you are connecting to the Router, click the box next to "First Computer."
If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".
First Computer
Additional Computer
Please select from the following options:
First Computer
Additional Computer
< Back
Next >
Help
Finish
Cancel

3. Select **Wired**, then click **Next**.

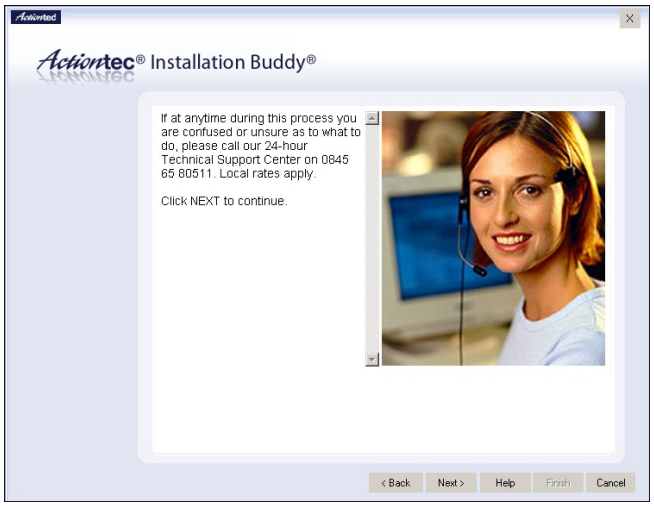

Actiontec® Installation Buddy®
Do you want to connect this Cable Router using a WIRED (USB or Ethernet) or WIRELESS connection?
(Note: If you already have a Wireless device installed on this computer, select "Wireless". Click NEXT to continue.
Wireless or Wired?
Please select from the following options:
Wireless
Wired (USB or Ethernet)
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

4. Select **Ethernet**, then click **Next**.

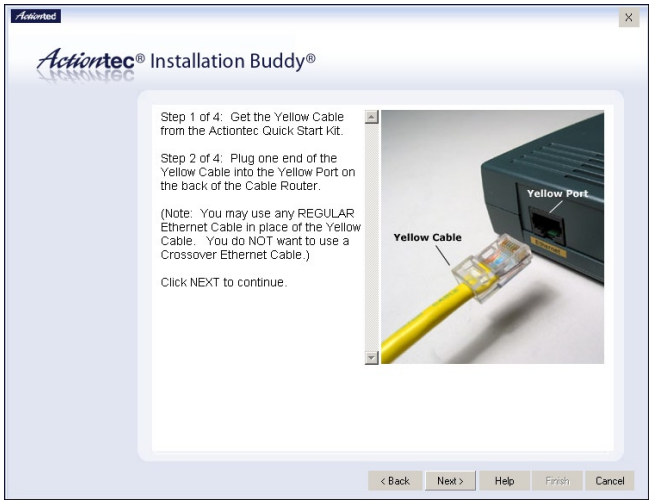

Actiontec® Installation Buddy®
Based on the answers to the questions that you have supplied, you may connect this Cable Router to your Computer in the following way(s):
(NOTE: USB connection is not supported on the 1st Computer setup if you are using the Set Top Box)
USB Port
Ethernet Port
Please select the PC connection type below:
Ethernet (Recommended)
USB
< Back
Next >
Help
Finish
Cancel

5. Read the on-screen instructions, then click **Next**.

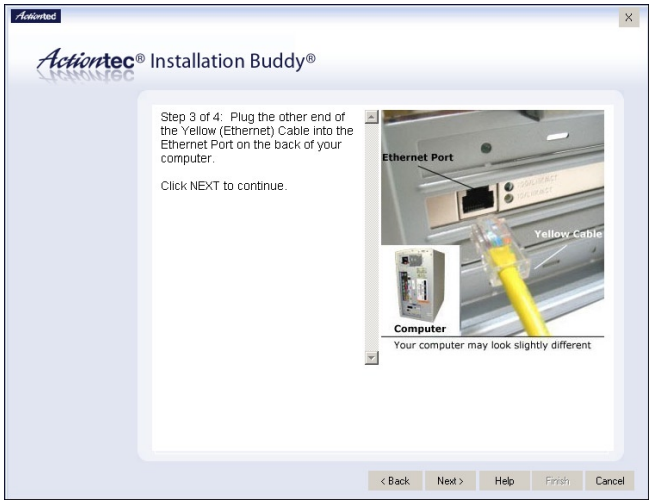

Actiontec® Installation Buddy®
If at anytime during this process you are confused or unsure as to what to do, please call our 24-hour Technical Support Center on 0845 65 80511. Local rates apply.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

6. Plug one end of the **yellow Ethernet cable** into the **yellow Ethernet port** on the back of the Router, then click **Next**.


Actiontec® Installation Buddy®
Step 1 of 4: Get the Yellow Cable from the Actiontec Quick Start Kit.
Step 2 of 4: Plug one end of the Yellow Cable into the Yellow Port on the back of the Cable Router.
(Note: You may use any REGULAR Ethernet Cable in place of the Yellow Cable. You do NOT want to use a Crossover Ethernet Cable.)
Click NEXT to continue.
Yellow Port
Yellow Cable
< Back
Next >
Help
Finish
Cancel

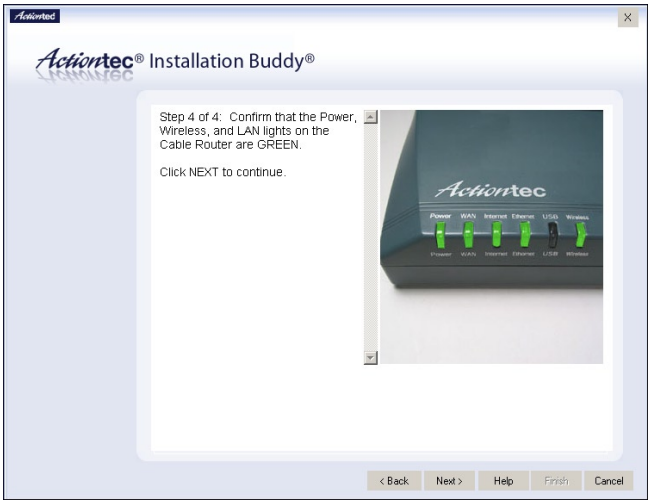
7. Plug the other end of the **yellow Ethernet cable** into an **Ethernet port** on the back of the computer, then click **Next**.


Actiontec® Installation Buddy®
Step 3 of 4: Plug the other end of the Yellow (Ethernet) Cable into the Ethernet Port on the back of your computer.
Click NEXT to continue.
Ethernet Port
Yellow Cable
Computer
Your computer may look slightly different
< Back
Next >
Help
Finish
Cancel

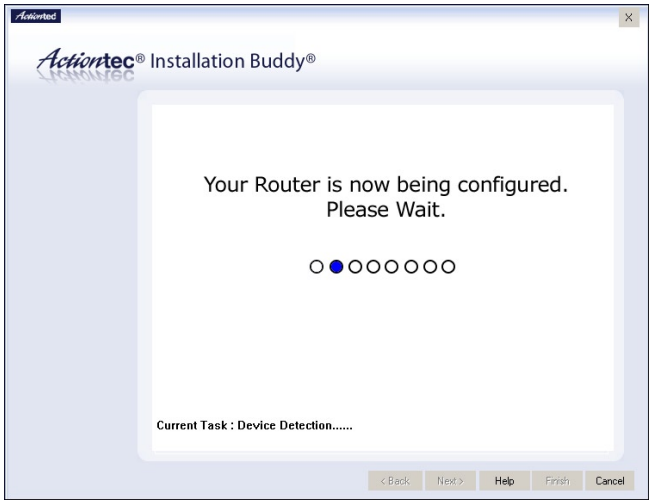
☞ ***Note***: An Ethernet port looks similar to a phone port, but is slightly bigger.

Downloaded from www.Manualslib.com manuals search engine

8. Make sure the **Power**, **WAN**, **Internet**, **Ethernet**, and **Wireless lights** glow solid green, then click **Next**.

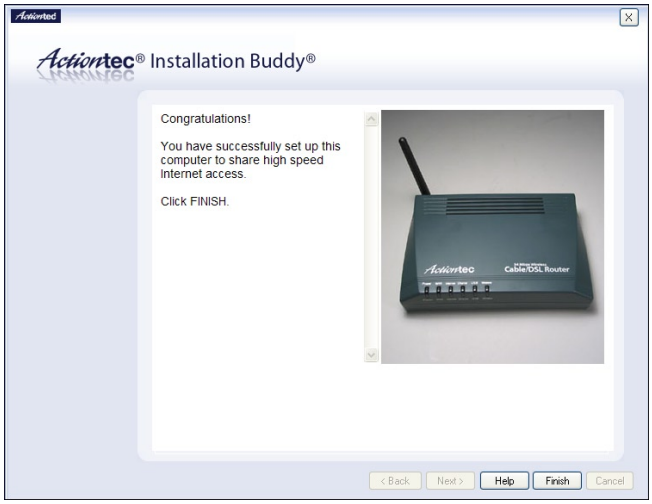

Actiontec® Installation Buddy®
Step 4 of 4: Confirm that the Power, Wireless, and LAN lights on the Cable Router are GREEN.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

9. In the next window, the Installation Buddy checks the configuration of the Router.



Downloaded from www.Manualslib.com manuals search engine

10. After the Router is configured, a congratulations screen appears.



The computer is connected to the Router via Ethernet.

USB

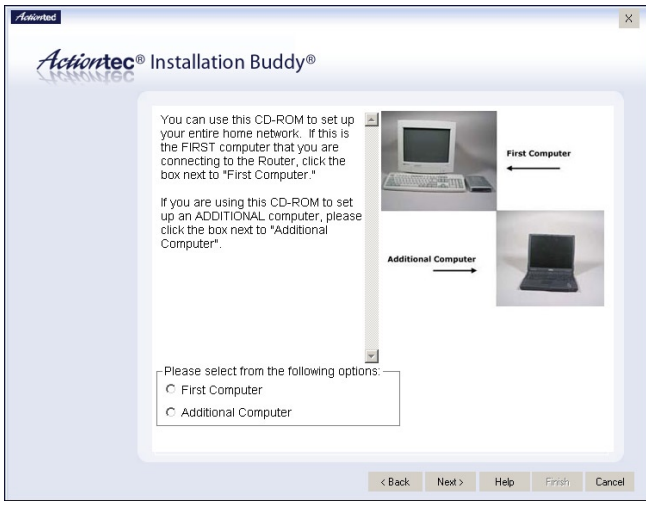
☞ ***Note***: An additional computer can be added to the Router's network via USB only if the first computer was connected to the Router via Ethernet (leaving the Router's USB port free). If the first computer was connected to the Router via USB, additional computers can be connected to the Router via Ethernet or wirelessly.

1. Insert the Installation CD in the CD-ROM drive of the computer. The Installation Buddy starts automatically. Wait until the following screen appears, read the on-screen instructions, select the service provider by clicking in the appropriate circle, then click **Next**.

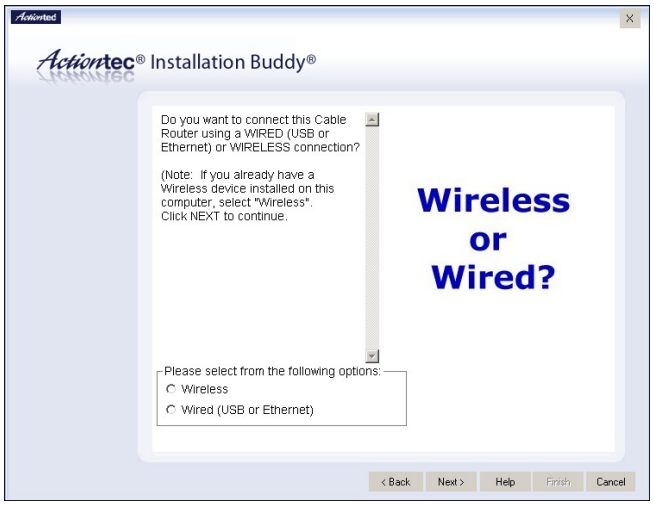
Actiontec® Installation Buddy®
Welcome to the Actiontec Installation Buddy for your Cable Broadband Connection !
This Installation Buddy will walk you through the easy steps to connect your Cable Router.
Click NEXT to begin the setup.
My Service Provider is:
AOL
NTL
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

2. Read the instructions, select **Addtional Computer** by clicking in the appropriate circle, then click **Next**.

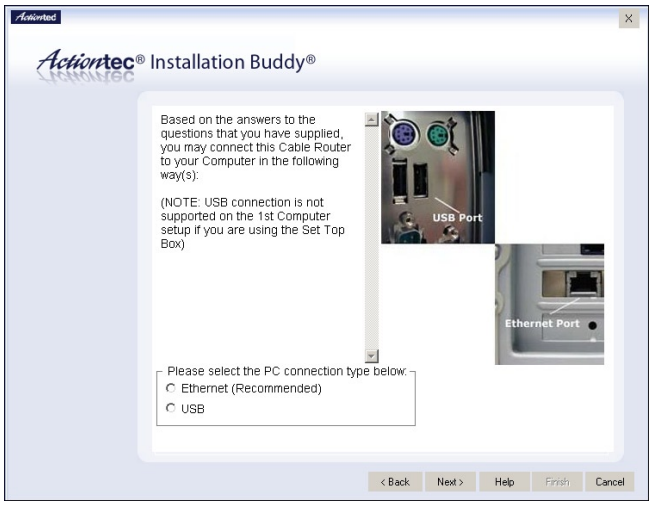

Actiontec® Installation Buddy®
You can use this CD-ROM to set up your entire home network. If this is the FIRST computer that you are connecting to the Router, click the box next to "First Computer."
If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".
First Computer
Additional Computer
Please select from the following options:
First Computer
Additional Computer
< Back
Next >
Help
Finish
Cancel

3. Select **Wired**, then click **Next**.

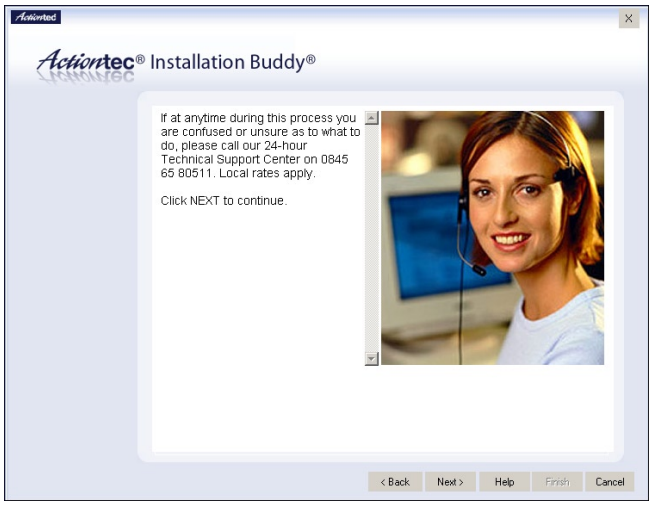

Actiontec® Installation Buddy®
Do you want to connect this Cable Router using a WIRED (USB or Ethernet) or WIRELESS connection?
(Note: If you already have a Wireless device installed on this computer, select "Wireless". Click NEXT to continue.
Wireless or Wired?
Please select from the following options:
Wireless
Wired (USB or Ethernet)
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

4. Select **USB**, then click **Next**.

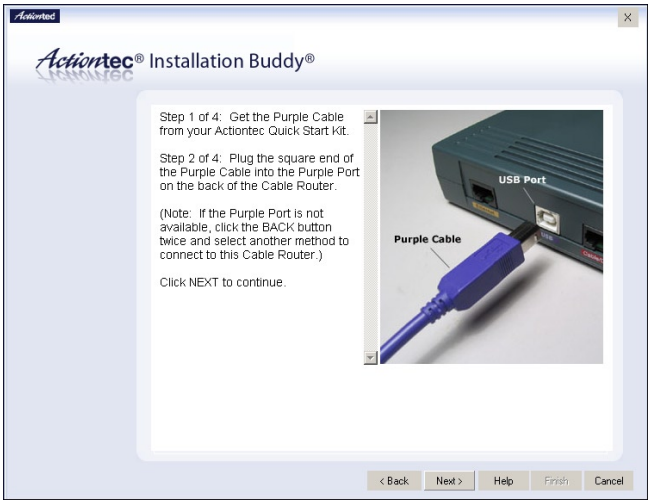

Actiontec® Installation Buddy®
Based on the answers to the questions that you have supplied, you may connect this Cable Router to your Computer in the following way(s):
(NOTE: USB connection is not supported on the 1st Computer setup if you are using the Set Top Box)
USB Port
Ethernet Port
Please select the PC connection type below:
Ethernet (Recommended)
USB
< Back
Next >
Help
Finish
Cancel

5. Read the on-screen instructions, then click **Next**.


Actiontec® Installation Buddy®
If at anytime during this process you are confused or unsure as to what to do, please call our 24-hour Technical Support Center on 0845 65 80511. Local rates apply.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

6. Plug the square end of the **purple USB cable** into the **USB port** on the back of the Router, then click **Next**.

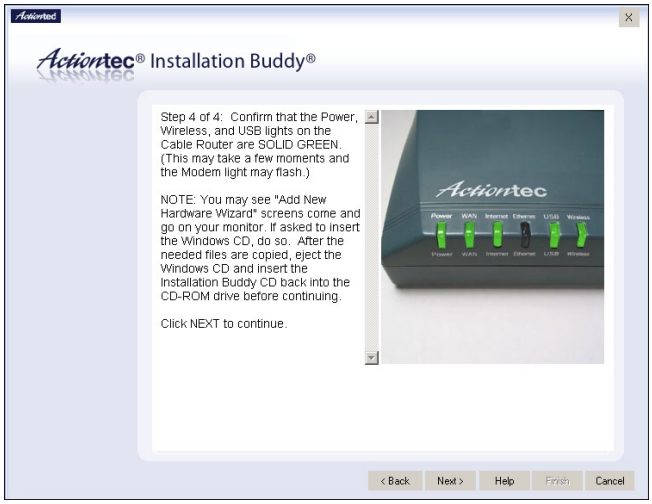

Actiontec® Installation Buddy®
Step 1 of 4: Get the Purple Cable from your Actiontec Quick Start Kit.
Step 2 of 4: Plug the square end of the Purple Cable into the Purple Port on the back of the Cable Router.
(Note: If the Purple Port is not available, click the BACK button twice and select another method to connect to this Cable Router.)
Click NEXT to continue.
USB Port
Purple Cable
< Back
Next >
Help
Finish
Cancel

7. Plug the rectangular end of the **purple USB cable** into an **USB port** on the front or back of the computer, then click **Next**.

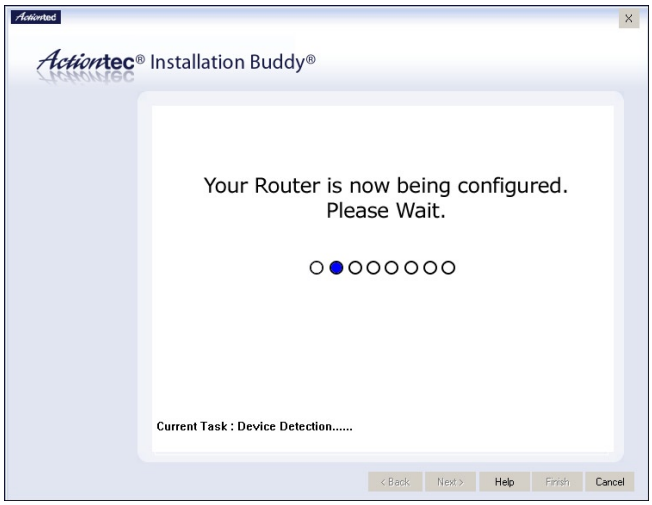
Actiontec® Installation Buddy®
Step 3 of 4: Plug the thin rectangular end of the Purple Cable into the USB Port on the front or back of your Computer.
(Note: The USB Port is shaped like a thin rectangle about 0.635 cm by 1.27 cm and is horizontally or vertically oriented.)
Click NEXT to continue.
Computer
USB Port
Purple Cable
Computer
Your Computer may look slightly different
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

8. Make sure the **Power**, **WAN**, **Internet**, **USB**, and **Wireless lights** glow solid green, then click **Next**.

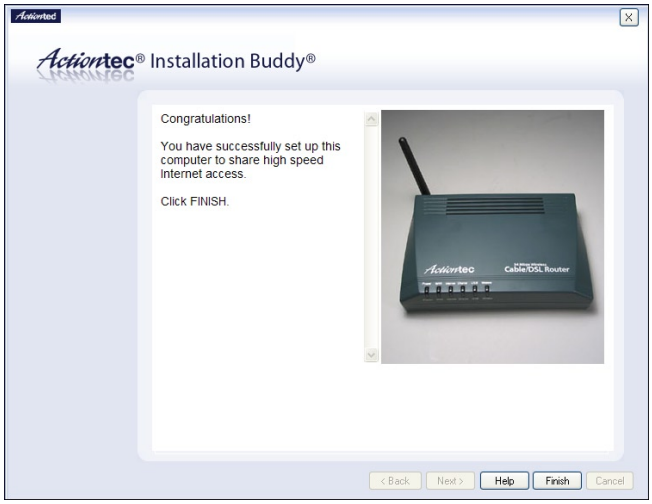

Actiontec® Installation Buddy®
Step 4 of 4: Confirm that the Power, Wireless, and USB lights on the Cable Router are SOLID GREEN. (This may take a few moments and the Modem light may flash.)
NOTE: You may see "Add New Hardware Wizard" screens come and go on your monitor. If asked to insert the Windows CD, do so. After the needed files are copied, eject the Windows CD and insert the Installation Buddy CD back into the CD-ROM drive before continuing.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

9. The Router is configured.



Downloaded from www.Manualslib.com manuals search engine

10. After the Router is configured, a congratulations screen appears.



The computer is connected to the Router via USB.

Wireless

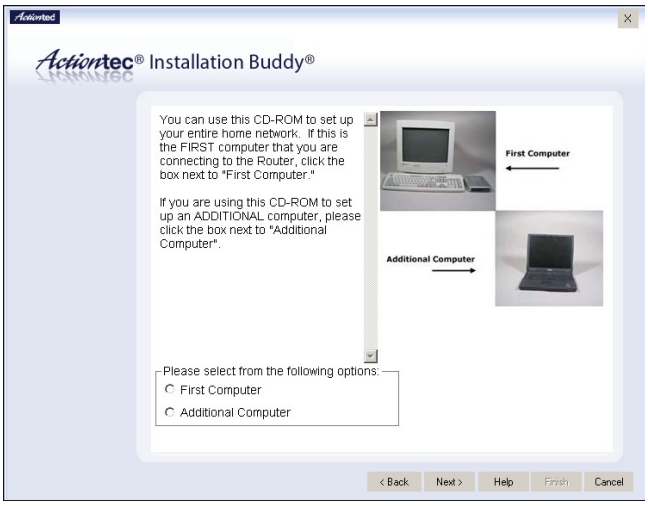
☞ ***Note***: Computers wirelessly connected to the Router must have wireless capabilities (via a PCI wireless adapter, USB wireless adapter, built-in wireless adapter, etc.).

1. Insert the Installation CD in the CD-ROM drive of the computer. The Installation Buddy starts automatically. Wait until the following screen appears, read the on-screen instructions, select the service provider by clicking in the appropriate circle, then click **Next**.

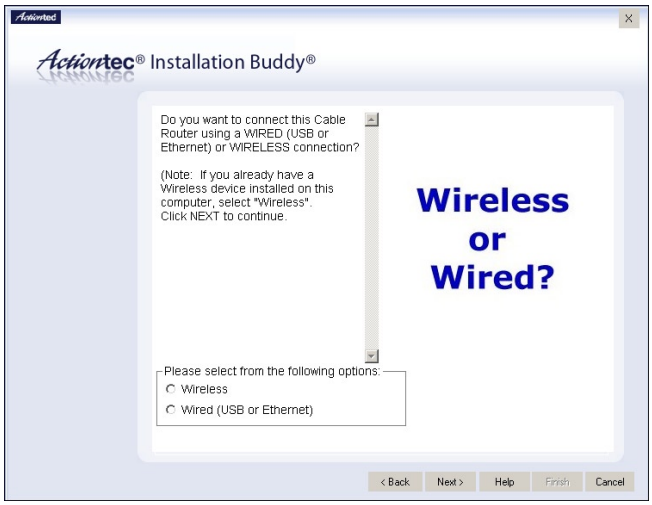
Actiontec® Installation Buddy®
Welcome to the Actiontec Installation Buddy for your Cable Broadband Connection !
This Installation Buddy will walk you through the easy steps to connect your Cable Router.
Click NEXT to begin the setup.
My Service Provider is:
AOL
NTL
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

2. Read the instructions, select **Addtional Computer** by clicking in the appropriate circle, then click **Next**.

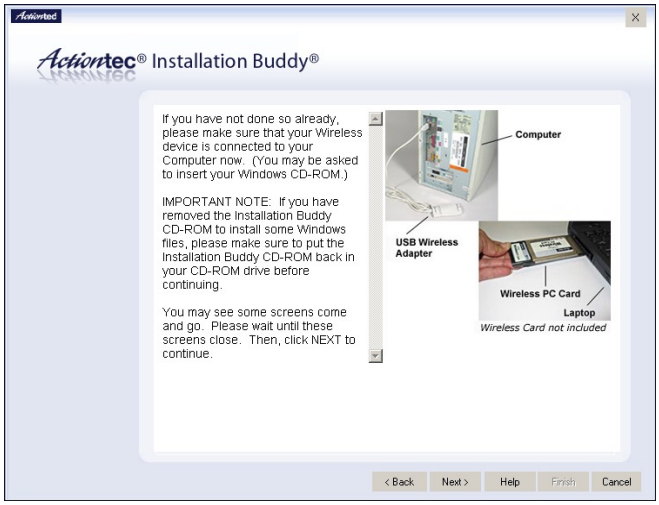

Actiontec® Installation Buddy®
You can use this CD-ROM to set up your entire home network. If this is the FIRST computer that you are connecting to the Router, click the box next to "First Computer."
If you are using this CD-ROM to set up an ADDITIONAL computer, please click the box next to "Additional Computer".
First Computer
Additional Computer
Please select from the following options:
First Computer
Additional Computer
< Back
Next >
Help
Finish
Cancel

3. Select **Wireless**, then click **Next**.


Actiontec® Installation Buddy®
Do you want to connect this Cable Router using a WIRED (USB or Ethernet) or WIRELESS connection?
(Note: If you already have a Wireless device installed on this computer, select "Wireless". Click NEXT to continue.
Wireless or Wired?
Please select from the following options:
Wireless
Wired (USB or Ethernet)
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

4. Read the on-screen instructions, then click **Finish**.

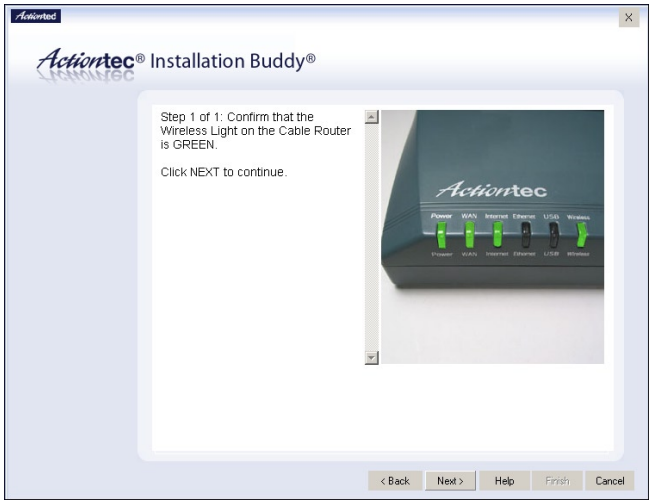

Actiontec® Installation Buddy®
If you have not done so already, please make sure that your Wireless device is connected to your Computer now. (You may be asked to insert your Windows CD-ROM.)
IMPORTANT NOTE: If you have removed the Installation Buddy CD-ROM to install some Windows files, please make sure to put the Installation Buddy CD-ROM back in your CD-ROM drive before continuing.
You may see some screens come and go. Please wait until these screens close. Then, click NEXT to continue.
Computer
USB Wireless Adapter
Wireless PC Card
Laptop
Wireless Card not included
< Back
Next >
Help
Finish
Cancel

5. Read the on-screen instructions, then click **Next**.

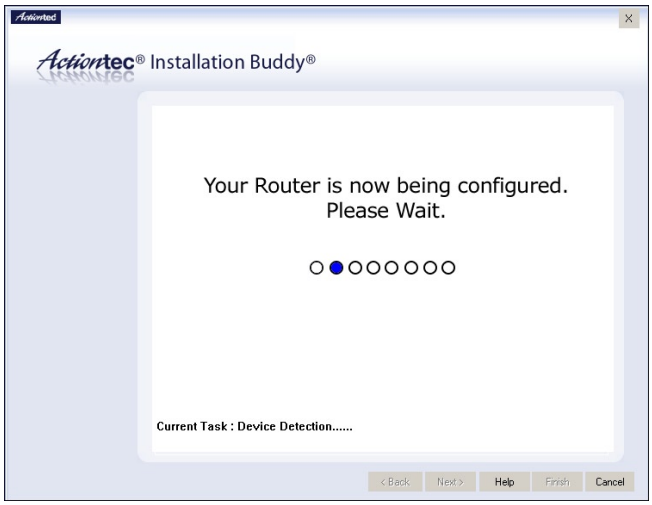
Actiontec® Installation Buddy®
If at anytime during this process you are confused or unsure as to what to do, please call our 24-hour Technical Support Center on 0845 65 80511. Local rates apply.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

Downloaded from www.Manualslib.com manuals search engine

6. Make sure the **Power**, **WAN**, **Internet**, and **Wireless** lights glow green, then click **Next**.

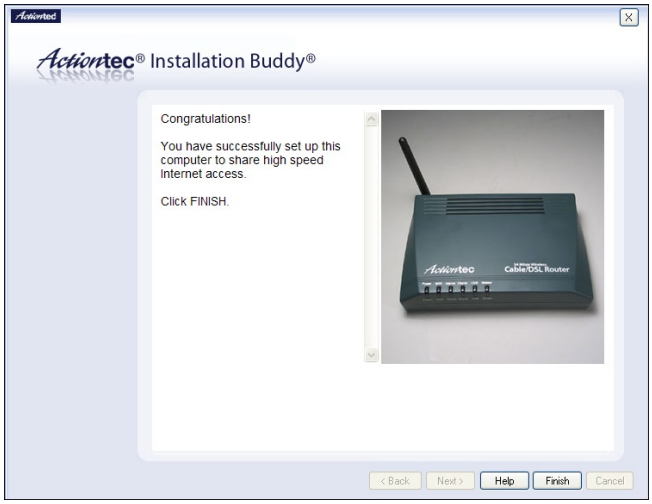

Actiontec® Installation Buddy®
Step 1 of 1: Confirm that the Wireless Light on the Cable Router is GREEN.
Click NEXT to continue.
< Back
Next >
Help
Finish
Cancel

7. The Router is configured.



Downloaded from www.Manualslib.com manuals search engine

8. After the Router is configured, a congratulations screen appears.



The computer is connected to the Router wirelessly.

After performing the procedure outlined in the screen, above, make sure the computer and the Router are using the same wireless network name. To wirelessly connect more computers to the Router, repeat this procedure..

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Troubleshooting 8

This chapter contains a list of problems that may be encountered while using the Router, and techniques to solve them. Note that these techniques may not be successful in all cases. Also included is a list of frequently asked questions.

Troubleshooting

Cannot Use the Internet

Connecting to an NTL cable modem

When connecting the Router to an NTL cable modem for the first time (or when reconnecting it), power off the cable modem and leave it off for at least 5 minutes before connecting to the Internet.

Physical Connections

Ensure the Router's Power light is on, as well as the appropriate lights for any active connections (Ethernet, USB, orWireless). If the connection is not active, reconnect the appropriate cable or adapter.

Connection to the Internet

To verify the Router's connection to the Internet, open a Web browser. In the "Address" text box, type `192.168.0.1` and click **Go**. The Router's Web Configurator Main Menu appears. Select **Status**, and once the "Status" screen appears, verify that "Connected" is displayed in the "WAN" section of the screen. If not, power cycle the Router by unplugging and then replugging the Power cord. After power cycling the Router, check the connection status again. If still disconnected, go to the Main Menu, select **Setup**, and go through a Basic Setup procedure, making sure to enter all correct selections for your connection. After saving all settings and restarting the Router, check the connection status again. If still disconnected, unplug the Router's Power cord and leave it unplugged for at least 10 minutes. Replug the Power cord, restart the Router, and check the connection again.

Downloaded from www.Manualslib.com manuals search engine

Using on Network With Another Router/Gateway

If setting up the Router on a network with another router or gateway, consult the documentation that came with the other router/gateway to see what kind of dynamic routing is required to operate it with the Router. Then, go to the "Dynamic Routing" screen (see "Dynamic Routing" on page 56) to select the appropriate type of dynamic routing.

Frequently Asked Questions

This section contains a list of common questions concerning the Router, and answers to the questions.

General

I have run out of Ethernet ports on my Router. How do I add more computers?

Plugging in an Ethernet hub or switch can expand the number of ports on the Router. Connect a standard Ethernet cable from the "Uplink" port of the new hub or switch to the Ethernet port on the Router, then connect additional computers to the Ethernet hub or switch.

Which protocols does the Router support?

The internal LAN connections support multiple protocols (e.g. TCP/IP, NetBEUI, IPX/SPX, and AppleTalk). The External WAN connection supports only TCP/IP.

Which connection speeds does the Router support?

The LAN connection on the Router supports 10/100 Mbps. The 802.11g wireless connection supports up to 54 Mbps connection speeds (depending on signal quality, environmental factors, and physical distance).

Will my Xbox work with the Router?

Yes, the Router is compatible with the Xbox. You will need to set a static IP on the Xbox in the Xbox live network settings, and forward ports 3074 (both UDP and TCP), 53 (both UDP and TCP), and 88 (UDP) if you run into DSL resolution errors.

Downloaded from www.Manualslib.com manuals search engine

Is the Router flash-upgradeable? How do I do it?

Yes, the firmware is upgradeable. You can find a link to the firmware site under "Utilities" in the Web-based configurator (see page 63).

Does the Router function as a DSL modem?

No, the Router does not have a DSL modem built-in.

Do I need a specific cable or DSL modem to use the Router?

No, the Router works with any Ethernet cable, and virtually any cable/DSL modem.

Wireless

Can I use an 802.11b wireless card to connect to the Router?

Yes, the Router can handle 802.11b cards or 802.11g cards. The 802.11g standard is backward compatible with the 802.11b standard. The Router can be set up to handle just "g" wireless cards, just "b" wireless cards, or both.

If I install several Routers in different locations in my building, will they be able to talk to each other? Will I be able to stay connected as I move between them?

The Router does not communicate with other access points, since it is a single access point system. If you install several Router devices and move between coverage areas, your wireless device would actually have to reconnect to a separate network.

Will cordless phones interfere with the Router?

The Router uses the 2.4 GHz frequency. If your cordless phone uses this frequency, problems may occur. Different cordless phones use different frequencies, and generally include a label stating which frequency they use. If you are having problems with interference caused by your cordless phone, try changing the Router's channel (see "Channel" on page 44). This can sometimes clear up interference issues. Any wireless device using the 2.4 GHz frequencies can cause wireless interference.

Downloaded from www.Manualslib.com manuals search engine

Which wireless cards will work with the Router?

The Router will connect with any wireless card supporting the 802.11g or 802.11b wireless standards.

Can my wireless signal pass through floors, walls, and glass?

The physical environment surrounding the Router can have a varying effect on wireless signal strength and quality. The denser an object, the greater the interference. Concrete or metal reinforced structures will cause a higher degree of signal loss than those made of wood, plaster, or glass.

I have an Apple computer that uses the Airport wireless device. Is this device compatible with the Router?

Yes, the Apple Airport system complies with the 802.11b standards. If you use the WEP security feature, refer to the Apple Airport documentation for information on the proper method to enter the WEP key for compatibility with the Router's hexadecimal WEP entry.

What is the best placement for the Router to gain maximum throughput and distance?

The best placement for the Router is in an elevated position, centrally located in the area of service. To reduce the effect of physical barriers, place the Router in a location with the least physical obstructions within the service area.

Network

I use my laptop at work and at home. Is there something special I need to do to make it work in both places?

Yes. You must reconfigure your network settings, including Workgroup, Domain, Password, User name, IP addressing, and any other specific settings used by your company. You may also use third-party software like NetSwitcher to automatically switch between different configurations.

What is the valid IP range I can use for my home network?

The valid IP range for the Router is 192.168.0.2 to 192.168.0.254, by default.

Downloaded from www.Manualslib.com manuals search engine

How do I find out which IP address my computer is using?

Windows 95, 98, 98SE, and Me - Select **Start**, **Run**, and type **`winipcfg`**. Press **Enter**. When the "Winipcfg" window appears, ensure your network device is selected.

Windows NT, 2000, and XP - Select **Start**, **Run** and type **`cmd`**. Press **Enter**. When the command screen is displayed, type **`ipconfig`** and press **Enter**.

I used DHCP to configure my network. Do I need to restart my computer to refresh my IP address?

No. Select the appropriate operating system, below, and follow the steps to refresh your IP address.

Windows 95, 98, 98SE, and Me - Go to **Start**, **Run**, type **`winipcfg`**, and press **Enter**. Ensure the Ethernet adapter is selected in the device box. Press the **Release_all** button, then press the **Renew_all** button.

Windows NT 4.0 and 2000 - Go to **Start**, **Run**, type **`cmd`**, and press **Enter**. At the DOS prompt type **`ipconfig /release`**, then type **`ipconfig /renew`**. (Note the space after **`ipconfig`**.)

Windows XP - Unplug the Ethernet cable or wireless card and plug it back in.

Can I run an application located on another computer over the network?

Yes, if the application is designed to run over a network.

Can I play games between computers on my network, or on the Internet?

Yes, if the games were designed for multi-player or LAN play. For specific information about whether a game is capable of Internet or LAN play, refer to the game documentation. Some games require ports to be forwarded to host or join games over the Internet (see "Port Forwarding" on page 54).

Downloaded from www.Manualslib.com manuals search engine

I have an FTP or Web server on my network. How can I make it available to users on the Internet?

For a Web server, enable port forwarding for port 8080 to the IP address of the server and set up the Web server to receive on that port, as well. (Configuring the server for static IP address use is recommended.) For an FTP server, enable port forwarding for port 21 to the IP address of the server. (Configuring the server for static IP address use is recommended.)

Connections

Everything appears to be set up properly with the Router, but I can't connect to the Internet. Why?

If you had your Internet connection already set up on your computer, you may need to power cycle your cable modem before the Router can sync up with the modem. Unplug the cab modem and the Router from their respective power outlets, and shut down your computer. Wait at least five minutes, then plug in the modem. Once your modem is back up, you can plug in the Router and restart your computer.

How many computers can be connected through the Router?

The Router is capable of 254 connections, but having no more than 45 connections is recommended. As the number of connections increases, the available speed for each computer decreases.

Security

What is WEP?

WEP (**W**ired **E**quivalent **P**rivacy) is the standard that encrypts 802.11g/802.11b communications.

What is the default username for the Router?

The default username for the router is **admin** (all lower case). To activate the password to protect the Router, change the default password, which is blank by default. Remote management (see page 53) is not available on the Router until the default password is changed.

Downloaded from www.Manualslib.com manuals search engine

What is the difference between 40-bit and 64-bit encryption?

There really is no difference between the two. They are just different terminologies used throughout the industry for the same level of encryption.

How do I make a HEX-based WEP key?

64-bit - Generated as 10 alphanumeric characters (0-9, a-f).
Example: 843c29a562.

128-bit - Generated as 26 alphanumeric characters (0-9, a-f).
Example: 3c29f2536bef3276d32e364asd.

What is WPA?

WPA (**W**i-Fi **P**rotected **A**ccess) is a new standard for wireless encryption for 802.11g/802.11b communications.

Does the Router function as a firewall?

Yes. The Router provides its security through the use of NAT firewall, which acts as a physical barrier between your network and the Internet. See Appendix F, "Firewall Security," on page 119 for more information.

What is NAT and how does it protect my network?

NAT (**N**etwork **A**ddress **T**ranslation) is a type of security that masks the private IP addresses of the computers on your network with a single public IP address. With NAT, the private IP address of the computers on your network is never transmitted over the Internet.

Which Virtual Private Networking (VPN) protocols are supported?

The Router supports pass-through for PPTP, L2TP, and IPSec.

Can I use Internet firewall or security programs with my network?

Because the Router uses NAT firewall security, it is not necessary to use any other program for security. The use of third-party firewall or Internet security software is not recommended, since certain programs create problems on a private network (BlackIce Defender, Norton Internet Security, and ZoneAlarm, for example).

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Reference

A

This appendix contains information about various topics, including accessing information about your Windows computer.

Locating Computer Information

The following procedure is valid for computers running Windows 98 SE, Me, NT 4.0, 2000, and XP.

1. From the desktop, right-click on **My Computer**.
2. Select **Properties** from the menu that appears.
3. When the "System Properties" window appears, select **General**. The version of the operating system, processor type, and amount of RAM installed in the computer are listed here.
4. Close the System Properties window.
5. From the desktop, double-click on **My Computer**.
6. Right-click the icon representing your hard disk. For example: Local Disk (C:). Some computers have multiple hard disks.
7. From the menu that appears, select **Properties**.
8. When the window appears, select **General**.
9. The free space value is the available space on the hard disk.
10. Close all windows.

Downloaded from www.Manualslib.com manuals search engine

Locating Windows Operating System Files

If the operating system files reside on the hard drive of the computer, follow the instructions below to locate them. If the files are not on the hard drive, they must be loaded from the installation disks.

Windows 98 SE

1. From the desktop, click **Start**.
2. When the menu appears, select **Find,** then **Files or Folders**.
3. When the "Find: All Files" window appears, select **Name & Location**.
4. In the "Named" text box, enter:
   ```
   *.cab
   ```
5. Click the **down arrow** next to the "Look In" text box and select **My Computer** from the list that appears.
6. Click **Find Now**.
7. When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINDOWS \SYSTEM.
8. The Windows operating system files are located in this directory. Write down the directory path for future reference.
9. Close the Find: All Files window.

Windows Me, 2000

1. From the desktop, click **Start**.
2. Select **Search**, then **For Files and Folders**.

3a. Windows Me: The "Search Results" window appears. In the "Search for files or folders named" text box, enter:
```
*.cab
```

3b. Windows 2000: The "Search Results" window appears. In the "Search for files or folders named" text box, enter:
```
i386
```


Downloaded from www.Manualslib.com manuals search engine

4. Click the **down arrow** next to the "Look in" text box and select **My Computer** from the list that appears.

5. Click **Search Now**.

6a. Windows Me: When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINDOWS \OPTIONS\INSTALL.

6b. Windows 2000: When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINNT \Driver Cache.

7. The Windows operating system files are located in this directory. Write down the directory path for future reference.

8. Close the Search Results window.

Windows NT 4.0

1. From the desktop, click **Start**.

2. When the menu appears, select **Find,** then **Files or Folders**.

3. When the "Find: All Files" window appears, select **Name & Location**.

4. In the "Named" text box, enter:

```
i386
```

5. Click the **down arrow** next to the "Look In" text box and select **My Computer** from the list that appears.

6. Click **Find Now**.

7. When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\.

8. The Windows operating system files are located in this directory. Write down the directory path (followed by "i386") for future reference.

9. Close the Find: All Files window.

Downloaded from www.Manualslib.com manuals search engine

Windows XP

1. From the desktop, click **Start**.
2. Select **Search**, then **For Files and Folders**.
3. The "Search Results" window appears. In the panel at left titled "What do you want to search for?", click **All files and folders**.
4. Another panel, titled "Search by any or all of the criteria below" appears. In the "Look in" text box, click the **down arrow** and select **My Computer** from the menu that appears.
5. In the "All or part of the file name" text box, enter:

   `i386`
6. Click **Search**.
7. When the search is complete, note the directory path that appears most often in the "In Folder" column. For example: C:\WINDOWS \Driver Cache\.
8. The Windows operating system files are located in this directory. Write down the directory path (followed by "\i386") for future reference.
9. Close the Search Results window.

Downloaded from www.Manualslib.com manuals search engine

Setting Up Static IP on the Computer

B

To communicate with the Router from a computer on the network (to use the Web Configuration Utility, for example), the user may have to switch the IP address settings from DHCP-enabled to static IP, so that the computer and the Router are on the same network subnet.

To set up static IP on a computer, select the operating system and follow the instructions.

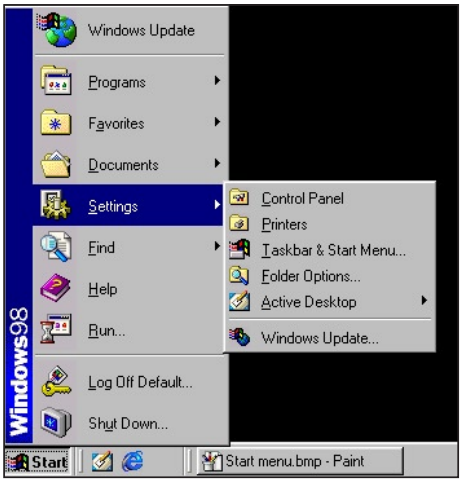
☞ ***Note***: The following procedures are based on the Router's factory default IP address. If the Router's IP address has been changed, enter the new IP address when instructed to enter an IP address.

Windows 98 SE

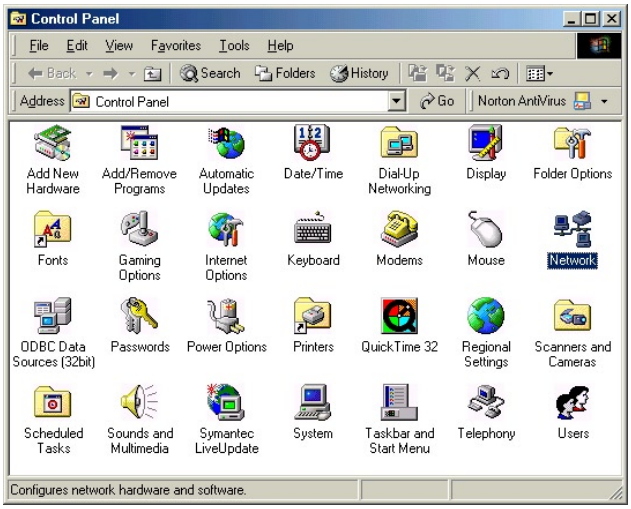
1. From the desktop, click on the **Start** button in the lower left corner.
2. From the menu that appears, select **Settings**.

Downloaded from www.Manualslib.com manuals search engine

3. Another menu appears. Select **Control Panel**.

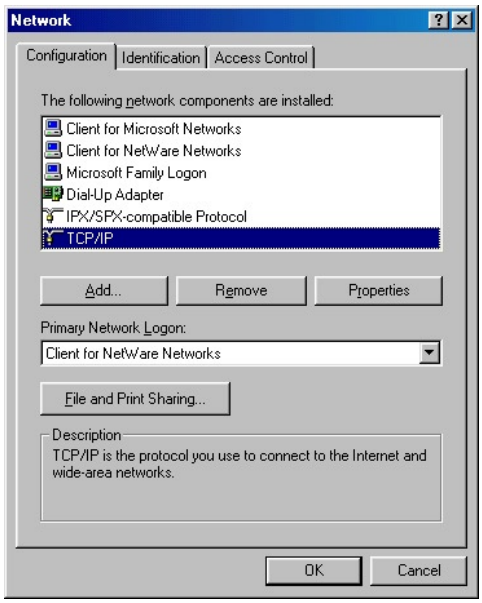


4. When the "Control Panel" window appears, double-click **Network**.

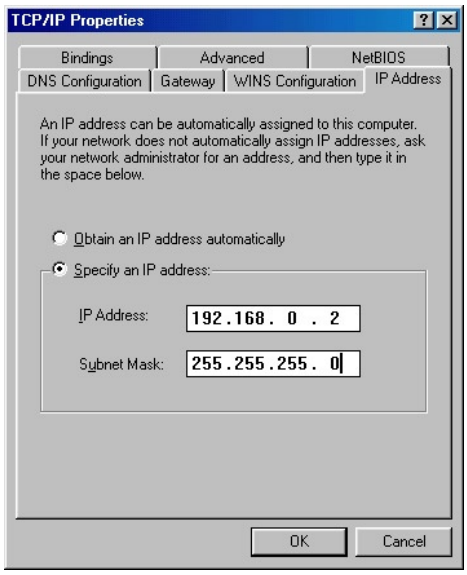


Downloaded from www.Manualslib.com manuals search engine

5. The "Network" window appears. In the "The following network components are installed" list box, locate and double-click **TCP/IP**.



6. The "TCP/IP Properties" window appears. Select **IP Address**.



7. In the IP Address tab, make sure the circle next to "Specify an IP Address" is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

8. Enter the following address in the "IP Address" text box:

`192.168.0.2`

Enter the periods in the address by pressing the space bar on the keyboard.

Downloaded from www.Manualslib.com manuals search engine

9. Enter the following address in the "Subnet mask" text box:

   `255.255.255.0`

   Enter the periods in the address by pressing the space bar on the keyboard.

10. Click **OK**. The TCP/IP Properties window disappears.

11. In the Network window, click **OK**. The Network window disappears.

12. The "System Settings Change" window appears, asking whether the computer should be restarted. Click **Yes**.

System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

The computer restarts. It is now set up with a static IP address, allowing access to the Router's Web Configuration Utility.

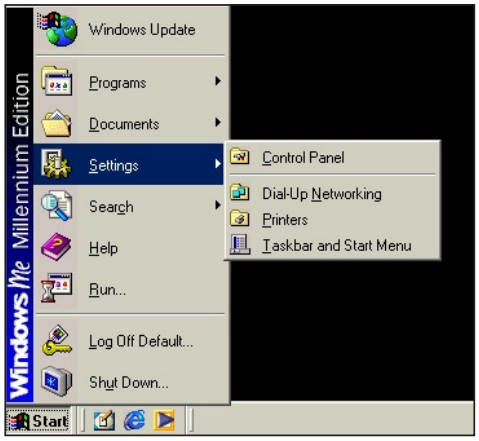
Windows Me

1. From the desktop, click on the **Start** button in the lower left corner.

2. From the menu that appears, select **Settings**.

Downloaded from www.Manualslib.com manuals search engine

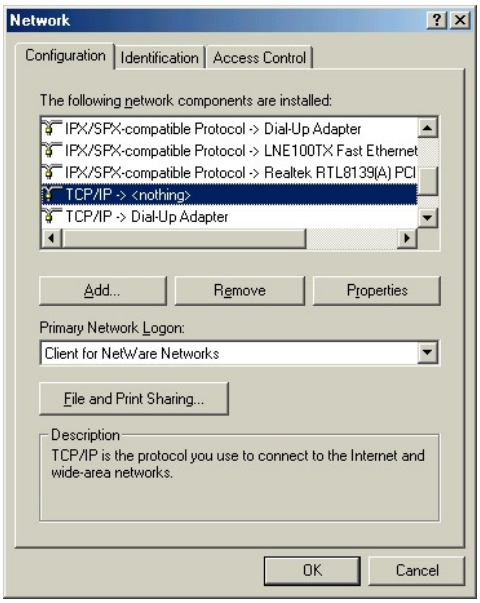
3. Another menu appears. Select **Control Panel**.



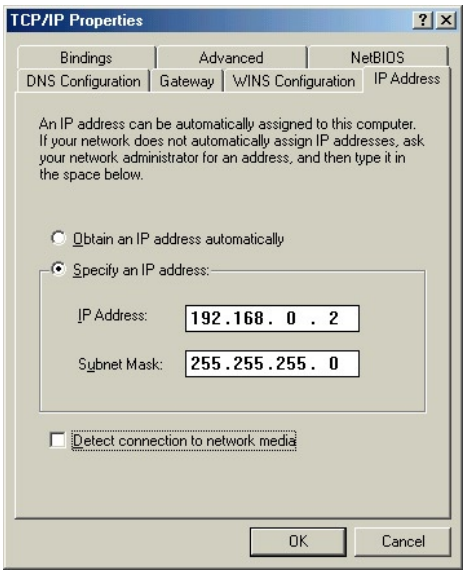
4. When the "Control Panel" window appears, double-click **Network**.

Downloaded from www.Manualslib.com manuals search engine

5. The "Network" window appears. In the "The following network components are installed" list box, locate and double-click **TCP/IP**.



6. The "TCP/IP Properties" window appears. Click **IP Address**.


TCP/IP Properties
Bindings
Advanced
NetBIOS
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer. If your network does not automatically assign IP addresses, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address automatically
Specify an IP address:
IP Address:
192.168. 0 . 2
Subnet Mask:
255.255.255. 0
Detect connection to network media
OK
Cancel

7. In the IP Address tab, make sure the circle next to "Specify an IP Address" is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

8. Enter the following address in the "IP Address" text box:

`192.168.0.2`

Enter the periods in the address by pressing the space bar on the keyboard.

Downloaded from www.Manualslib.com manuals search engine

9. Enter the following address in the "Subnet mask" text box:

   `255.255.255.0`

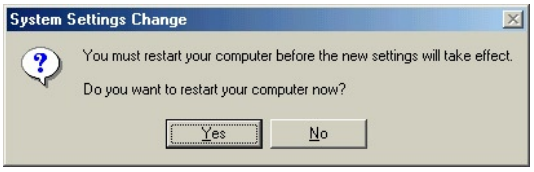
   Enter the periods in the address by pressing the space bar on the keyboard.

10. Click **OK**. The TCP/IP Properties window disappears.

11. If there is a check in the box next to "Detect connection to network media," click on it to uncheck the box.

12. In the Network window, click **OK**. The Network window disappears.

13. The "System Settings Change" window appears, asking whether the computer should be restarted. Click **Yes**.


System Settings Change
You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?
Yes
No

The computer restarts. It is now set up with a static IP address, allowing access to the Router's Advanced Setup utility.

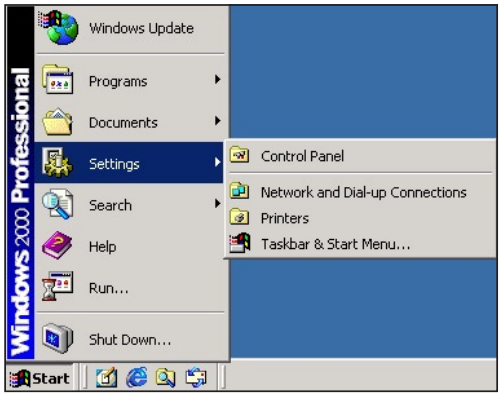
Windows 2000

1. From the desktop, click on the **Start** button in the lower left corner.

2. From the menu that appears, select **Settings**.

Downloaded from www.Manualslib.com manuals search engine

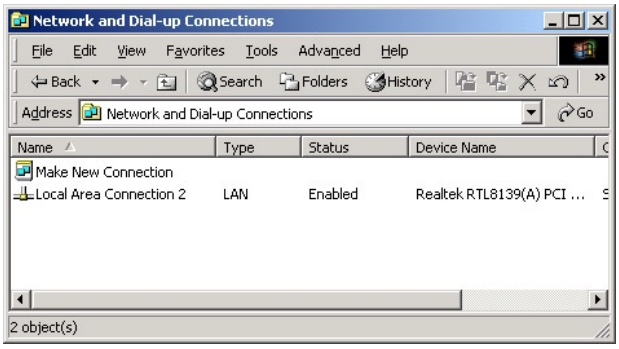
3. Another menu appears. Select **Control Panel**.



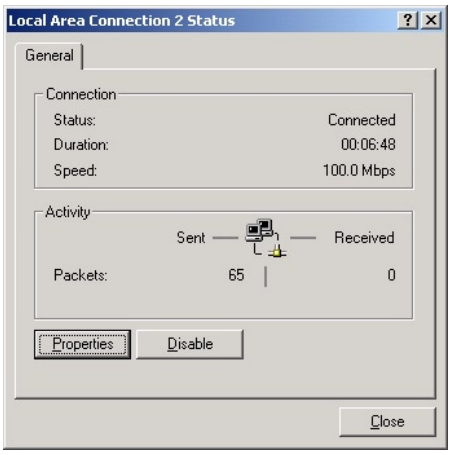
4. When the "Control Panel" window appears, double-click **Network and Dial-up Connections**.

Downloaded from www.Manualslib.com manuals search engine

5. In the "Network and Dial-up Connections" window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If more than one Local Area Connection is listed, locate the one that corresponds to the network card installed in the computer by finding the name of the network card in the **Device Name** column.


Network and Dial-up Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders History
Address Network and Dial-up Connections
Go
Name Type Status Device Name
Make New Connection
Local Area Connection 2 LAN Enabled Realtek RTL8139(A) PCI ...
2 object(s)

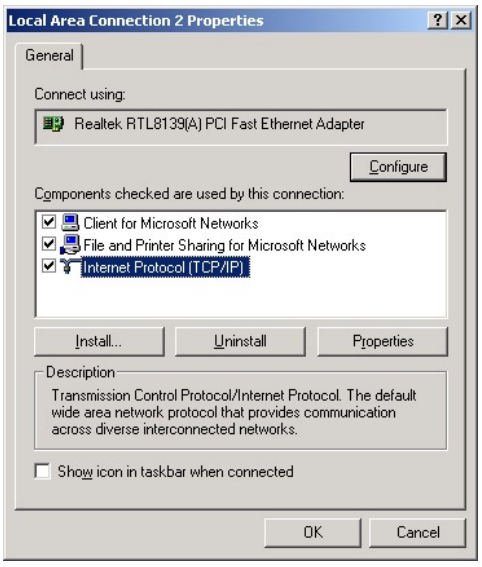
6. The "Local Area Connection Status" window appears. Select **General**, then click **Properties**.



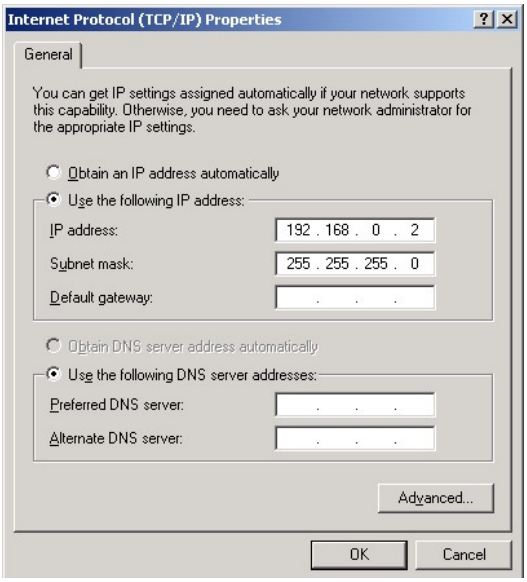
Downloaded from www.Manualslib.com manuals search engine

7. The "Local Area Connection Properties" window appears. Click **General**.

8. In the "Components checked are used by this connection" list box, double-click **Internet Protocol** (TCP/IP).



9. The "Internet Protocol (TCP/IP) Properties" window appears.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 0 . 2
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

10. In the **General** tab, make sure the circle next to "Use the following IP Address " is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

11. Enter the following address in the "IP Address" text box:

`192.168.0.2`

Enter the periods in the address by pressing the space bar on the keyboard.

Downloaded from www.Manualslib.com manuals search engine

12. Enter the following address in the "Subnet mask" text box:

`255.255.255.0`

Enter the periods in the address by pressing the space bar on the keyboard.

13. Click **OK**. The "Internet Protocol (TCP/IP) Properties" window disappears.

14 In the "Local Area Connection Properties" window, click **OK**. The Local Area Connection Properties window disappears.

15. Click **Close** in the Local Area Connection Status window. The window disappears.

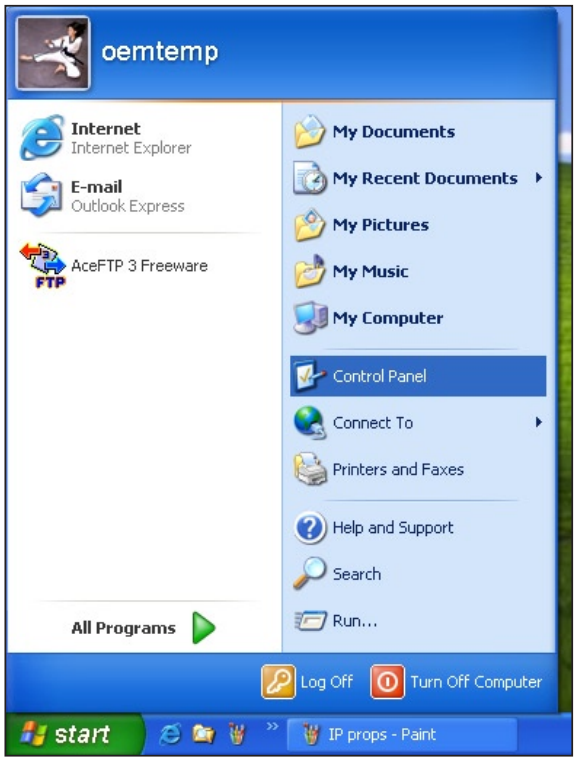
16. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up with a static IP address, allowing access to the Router's Web Configuration Utility.

Windows XP

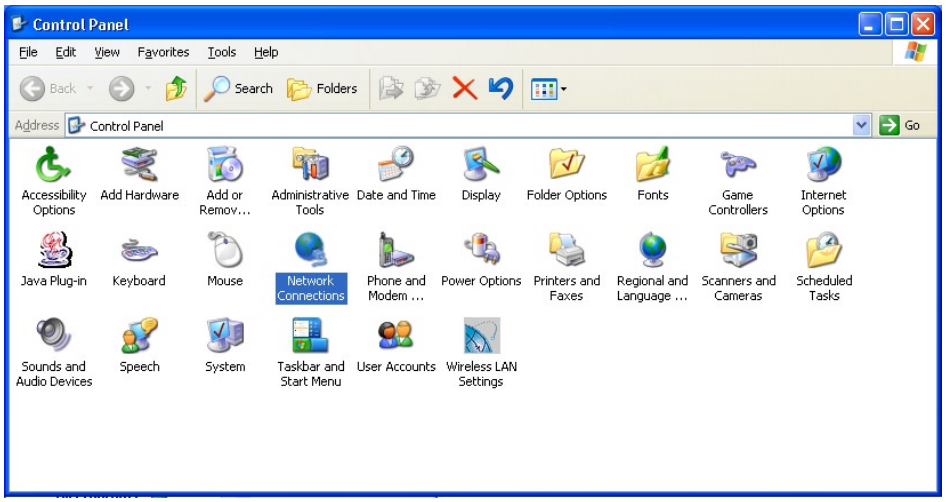
1. From the desktop, click on the **Start** button in the lower left corner.

2. From the menu that appears, select **Control Panel**.

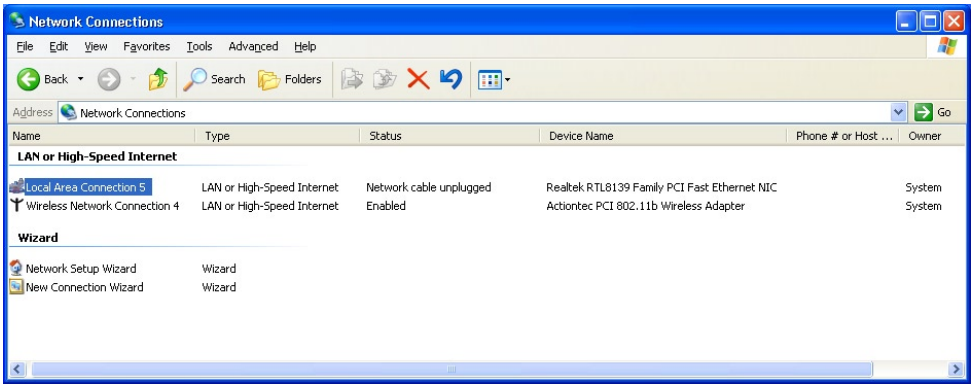


Downloaded from www.Manualslib.com manuals search engine

3. When the "Control Panel" window appears, double-click **Network Connections**.



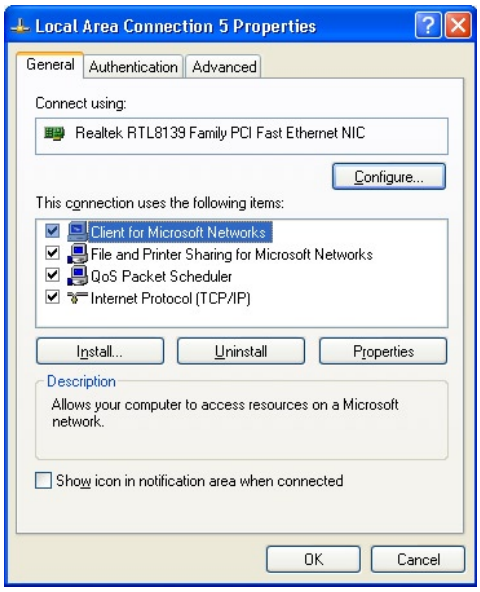
4. In the "Network Connections" window, double-click **Local Area Connection**. A number may be displayed after the Local Area Connection. If more than one Local Area Connection is listed, locate the one that corresponds to the network card installed in your computer by finding the name of the network card in the **Device Name** column.



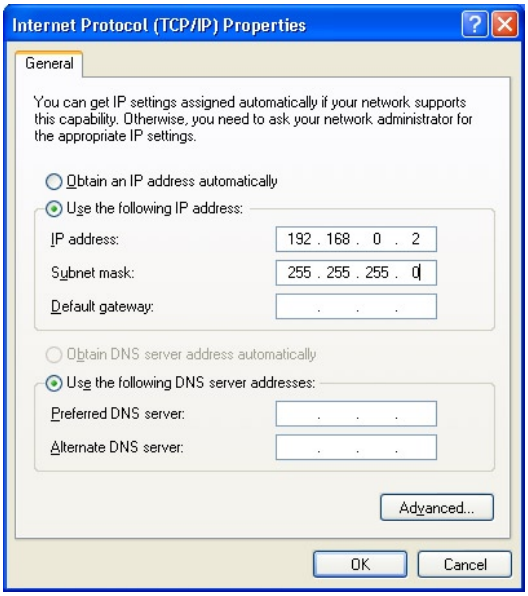
Downloaded from www.Manualslib.com manuals search engine

5. The "Local Area Connection Properties" window appears. Select **General**.

6. In the "This connection uses the following items" list box, double-click **Internet Protocol** (TCP/IP).



7. The "Internet Protocol (TCP/IP) Properties" window appears.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
192 . 168 . 0 . 2
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

8. In the **General** tab, make sure the circle next to "Use the following IP Address " is selected. When active, a black dot appears in the circle. If the circle already contains a black dot, leave it alone.

Downloaded from www.Manualslib.com manuals search engine

9. Enter the following address in the "IP Address" text box:
   `192.168.0.2`
   Enter the periods in the address by pressing the space bar on the keyboard.

10. Enter the following address in the "Subnet mask" text box:
    `255.255.255.0`
    Enter the periods in the address by pressing the space bar on the keyboard.

11. Click **OK**. The Internet Protocol (TCP/IP) Properties window disappears.

12 In the Local Area Connection Properties window, click **Close**. The Local Area Connection Properties window disappears.

13. Click **Close** in the Local Area Connection Status window. The window disappears.

14. Close the Network and Dial-up Connections window by clicking on the "**x**" button at the upper right corner of the window.

The computer is now set up with a static IP address, allowing access to the Router's Web Configuration Utility.

Downloaded from www.Manualslib.com manuals search engine

Computer Security

The Internet is a giant network of computers located all over the world. When a computer is connected to the Internet, it can exchange information with any other computer on the Internet. This allows a computer user to send E-mail, surf the World Wide Web, download files, and buy products and services online, but it also makes the computer vulnerable to attack from persons intent on doing harm. Unless access to the computer is controlled, someone on the Internet can access the information on the computer and steal, damage, or destroy that information.

*Action*tec recommends securing your computer from unwanted intrusion. Security is ultimately the end user's responsibility. Please secure your computer, and don't be a victim.

Comparing Broadband Service with a Dial-Up Modem

With a dial-up modem, a computer user makes an Internet connection by dialing a telephone number, surfs the Internet for a period of time, and then disconnects the dial-up modem. No one on the Internet can access a computer not connected to the Internet.

Unlike a dial-up modem, broadband service is "always connected." The connection is always available – there is no need to dial a phone number to access the Internet. The computer can be connected to the Internet all the time.

With both types of Internet connections, access to the computer must be controlled to make sure someone on the Internet doesn't access the information on the computer. The longer the computer is connected to the Internet, the easier it is for someone on the Internet to find the computer and attempt to access it without permission. Broadband service also provides fast Internet connections. This not only improves Internet performance, it also improves Internet performance for anyone attempting to access the computer.

Downloaded from www.Manualslib.com manuals search engine

Router Security

If connecting to the ISP through Point-to-Point Protocol (PPP), be sure to provide the Router an administrative password. If a password is not set, someone on the Internet can access the Router and change its configuration or steal your PPP login name and password. For instructions on setting the password, see the "Advanced Setup" chapter.

If connecting to the ISP through bridging mode, the Router should be safe from unwarranted and illegal intrusion.

Computer Security

To protect the valuable information on the computer, review the following topics. These topics cover software programs and operating system features affecting the security of the computer's data.

Anti-Virus Programs

The computer should have an anti-virus program, and the virus definitions should be updated on a regular basis – at least once a month.

E-Mail Attachments

Never run a program received as an attachment to an E-mail message unless the program is known to be safe. A program from an unknown source can delete all the files on the computer's hard disk or install a "back door" software application that lets people on the Internet gain access to the computer without permission.

Internet Browsers

Always exit the Internet browser (Internet Explorer or Netscape Navigator, for example). Never "minimize" the browser or leave it open in the background. Breaking into a computer is easier when an Internet browser is running.

Downloaded from www.Manualslib.com manuals search engine

Network Applications

Network applications (such as software programs) that allow remote access to the computer also make the computer vulnerable to access from other people on the Internet. If using a network application that allows remote access, consider installing a firewall.

Electronic Security

Here are two methods to secure your computer electronically.

Network Address Translation

If a local area network and a PPP connection to the ISP using dynamic IP addresses through a DHCP server are being used, Network Address Translation (NAT) is being used. NAT provides a very basic level of security.

Firewalls

The safest way to prevent attacks on the computer is through a firewall – a hardware device or software program that protects the computer from unauthorized access by controlling who can access your computer and by monitoring the transmissions between the computer and the Internet

Windows XP has a built-in firewall. For more information, select **Help and Support Center** from the Help menu. Search for **Internet Connection Firewall**.

If Windows 98 SE, Me, NT 4.0, or 2000 is running on the computer, consider installing a firewall. Hardware and software firewall products are changing rapidly as more homes and businesses establish high-speed digital connections between their local area networks and the Internet.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Specifications

D

General

Model Number

GT701WRU-00 (54 Mbps Wireless Cable Router)

Standards

IEEE 802.3x (10BaseT, full duplex capable)
IEEE 802.3u (100BaseTX, auto negotiation)
IEEE 802.11b/g (Wireless)

Protocol

LAN - CSMA/CD

WAN

10/100 RJ-45 Ethernet port

LAN

10/100 RJ-45 switched Ethernet port

Speed

LAN Ethernet - 10/100 Mbps auto-sensing
Wireless - 802.11g 54 Mbps optimal (see "Wireless Operating Range" for details)

Cabling Type

Ethernet 10BaseT - UTP/STP Category 3 or 5
Ethernet100BaseTX - UTP/STP Category 5

Downloaded from www.Manualslib.com manuals search engine

Wireless Operating Range

Indoors

Up to 91 M (300 ft.)

Outdoors

Up to 533 M (1750 ft.)

Topology

Star (Ethernet)

LED Indicators

Power, WAN, Internet, Ethernet, USB, Wireless

Environmental

Power

External, 12V DC, 600mA

Certifications

FCC Class B, FCC Class C (part 15, 68), CE Mark Commercial, UL

Operating Temperature

0º C to 40º C (32º F to 104º F)

Storage Temperature

-20º C to 70º C (-4º F to 158º F)

Operating Humidity

10% to 85% (non-condensing)

Storage Humidity

5% to 90% (non-condensing)

Note: Specifications are subject to change without notice.

Downloaded from www.Manualslib.com manuals search engine

Glossary

Access Point

A device that allows wireless clients to connect to one another. An access point can also act as a bridge between wireless clients and a "wired" network, such as an Ethernet network. Wireless clients can be moved anywhere within the coverage area of the access point and remain connected to the network. If connected to an Ethernet network, the access point monitors Ethernet traffic and forwards appropriate Ethernet messages to the wireless network, while also monitoring wireless traffic and forwarding wireless client messages to the Ethernet network.

ATM (Asynchronous Transfer Mode)

A networking technology based on transferring data in fixed-size packets.

Client

A desktop or mobile computer connected to a network.

DHCP (Dynamic Host Configuration Protocol)

A protocol designed to automatically assign an IP address to every computer on the network.

DNS (Domain Name System) Server Address

Allows Internet host computers to have a domain name and one or more IP addresses. A DNS server keeps a database of host computers and their respective domain names and IP addresses so that when a user enters a domain name into a Web browser, the user is sent to the proper IP address. The DNS server address used by computers on the home network corresponds to the location of the DNS server the ISP has assigned.

DSL (Digital Subscriber Line) Modem

A modem that uses existing phone lines to transmit data at high speeds.

Encryption

A method to provide wireless data transmissions a level of security.

ESSID (Extended Service Set Identifier)

A unique identifier for a wireless network. Also known as "SSID."

Downloaded from www.Manualslib.com manuals search engine

Ethernet Network

A standard wired networking configuration using cables and hubs.

Firewall

A method preventing users outside the network from accessing and/or damaging files or computers on the network.

Gateway

A central device that manages the data traffic of the network, as well as data traffic to and from the Internet.

IP (Internet Protocol) Address

A series of four numbers separated by periods identifying a unique Internet computer host.

ISP Gateway Address

An IP address for the Internet router. This address is only required when using a cable or DSL modem.

ISP (Internet Service Provider)

A business that allows individuals or businesses to connect to the Internet.

LAN (Local Area Network)

A group of computers and devices connected together in a relatively small area (such as a house or an office). A home network is considered a LAN.

MAC (Media Access Control) Address

The unique hardware address of a device connected to a network.

NAT (Network Address Translation)

A method allowing all of the computers on a home network to use one IP address, enabling access to the Internet from any computer on the home network without having to purchase more IP addresses from the ISP.

PC Card

An adapter that inserts in the PCMCIA slot of a computer, enabling the communication with a device.

Downloaded from www.Manualslib.com manuals search engine

PPPoE (Point-To-Point Protocol over Ethernet)/ PPPoA (Point-To-Point Protocol over ATM)

Methods of secure data transmission.

Router

A central device that manages the data traffic of the network.

Subnet Mask

A set of four numbers configured like an IP address used to create IP address numbers used only within a particular network.

SSID

See "ESSID."

TCP/IP (Transmission Control Protocol/Internet Protocol)

The standard protocol for data transmission over the Internet.

WAN (Wide Area Network)

A network that connects computers located in separate areas, (i.e., different buildings, cities, countries). The Internet is a WAN.

WECA (Wireless Ethernet Compatibility Alliance)

An industry group that certifies cross-vender interoperability and compatibility of IEEE 802.11b wireless networking products and promotes the standard for enterprise, small business, and home environments.

WLAN (Wireless Local Area Network)

A group of computers and other devices connected wirelessly in a small area.

Downloaded from www.Manualslib.com manuals search engine

This page left intentionally blank.

Downloaded from www.Manualslib.com manuals search engine

Firewall Security Level Services Table

The following information is related to the Firewall options (High, Medium, and Low) section in the "Advanced Setup" chapter of this manual (see page 56). The types of services and their respective ports are listed in the two right-hand columns: the "In" column details whether a particular service can be accessed by a user outside of the network; and the "Out" column details whether a computer on the Router's network can access a particular incoming service.

For example, in the "High Security Level" section below, the **http** service uses **port 80**. Since **no** is listed in the **In** column, a user outside the Router's network cannot access a computer on the network via the http service; in this case, no computers on the network can be used as a Web server (i.e., to host a Web site accessible to outside users). However, since **yes** is listed in the **Out** column, all computers on the Router's network can access the Internet via the http port.
If Basic Security is selected in the "Firewall" screen, firewall filtering is based on the basic NAT firewall.

High Security Level

Service	Port	In	Out
http	80	no	yes
dns	53	no	yes
ftp	21	no	no
telnet	23	no	no
smtp	25	yes	yes
pop3	110	yes	yes
nntp	119	no	no
real audio/video	7070	no	no
icmp	n/a	no	yes
H.323	1720	no	no
T.120	1503	no	no
SSH	22	no	no
imap	163	yes	yes
https	443	yes	yes
secure imap	983	yes	yes
secur pop3	885	yes	yes

Downloaded from www.Manualslib.com manuals search engine

Medium Security Level

Service	Port	In	Out
http	80	no	yes
dns	53	no	yes
ftp	21	no	yes
telnet	23	no	yes
smtp	25	yes	yes
pop3	110	yes	yes
nntp	119	no	yes
real audio/video	7070	yes	yes
icmp	n/a	no	yes
H.323	1720	no	yes
T.120	1503	yes	yes
SSH	22	no	yes
imap	163	yes	yes
https	443	yes	yes
secure imap	983	yes	yes
secure pop3	885	yes	yes

Low Security Level

Service	Port	In	Out
http	80	no	yes
dns	53	yes	yes
ftp	21	no	yes
telnet	23	no	yes
smtp	25	yes	yes
pop3	110	yes	yes
nntp	119	no	yes
real audio/video	7070	no	yes
icmp	n/a	yes	yes
H.323	1720	yes	yes
T.120	1503	yes	yes
SSH	22	yes	yes
imap	163	yes	yes
https	443	yes	yes
secure imap	983	yes	yes
secure pop3	885	yes	yes

Downloaded from www.Manualslib.com manuals search engine

Basic Security Level

NAT (**N**etwork **A**ddress **T**ranslation) only.

Service Acronym Definitions

http

Hyper**T**ext **T**ransfer **P**rotocol. This protocol delivers information over the Internet, and is used when a computer connects to a Web site via an Internet browser.

dns

Domain **N**ame **S**ystem. A data query system used to translate host names into Internet addresses (i.e., www.somewebsite.com translates to 888.999.000.111).

ftp

File **T**ransfer **P**rotocol. A protocol used to transfer files over the Internet.

telnet

An Internet communications protocol enabling one computer to function as a terminal working from another (remote) computer.

smtp

Simple **M**ail **T**ransfer **P**rotocol. A protocol used to transfer E-mail between computers over the Internet. Can be used to send and receive mail.

pop3

Post **O**ffice **P**rotocol 3. Another protocol used to transfer E-mail between computers. Usually employs a pop3 server, and is used to receive mail only.

nntp

Network **N**ews **T**ransfer **P**rotocol. A protocol used to distribute and retrieve news articles over the Internet.

Downloaded from www.Manualslib.com manuals search engine

real audio/video

A protocol used to transfer Real Audio or Real Video files.

icmp

Internet **C**ontrol **M**essage **P**rotocol. Allows error messages, text packages, and informational messages to be transferred over the Internet.

H.323

A standard protocol for sending audio and video over the Internet.

T.120

A standard protocol for multimedia teleconferencing over the Internet.

SSH

Secure **Sh**ell. A method for the secure transfer of files from another computer. Also enables remote capabilities (terminal, log in, etc.).

imap

Internet **M**essage **A**ccess **P**rotocol. A protocol for retrieving E-mail messages.

https

Hyper**T**ext **T**ransfer **P**rotocol using **S**ecure Socket Layer. A secure version of the protocol that delivers information over the Internet.

Downloaded from www.Manualslib.com manuals search engine

Non-Windows System Setup

G

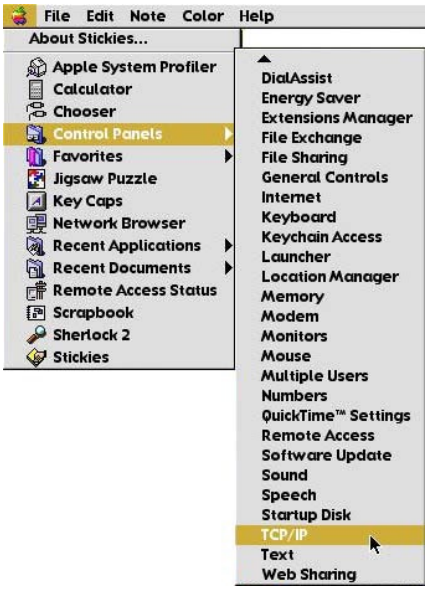
The Router supports both the Classic Macintosh operating systems (9.2.2 and below), as well as OS X.

☞ ***Note***: When installing any software, consult the user manual and help files supplied with the software for detailed information. *Action*tec provides the following information as a guideline only.

Classic

To configure the Router, Open Transport 2.5.2 or above must be loaded on the computer.

1. Click **Apple, Control Panels**, then **TCP/IP**.



Downloaded from www.Manualslib.com manuals search engine

2. When the "TCP/IP" window appears, select **Edit** from menu bar, then select **User Mode**.

3. When the "User Mode" window appears, select **Advanced**, then click **OK**.

4. In the "TCP/IP" window, select **Ethernet** from the "Connect via" drop-down list.

5. Select **Using DHCP Server** from the "Configure" drop-down list.

6. Ensure the "Use 802.3" option is **not** checked.

7. Disregard any addresses in the IP Address text boxes. They will be reacquired when the first connection is made.

8. Click **Options** and when the "TCP/IP Options" window appears, select **Active**. Ensure the "Load only when needed" option is **not** checked, then click **OK**.

9. Close the "TCP/IP" window and when prompted to save changes, click **Save**.

10. Restart the computer. The TCP/IP settings are configured.

To finish setting up the computer to connect with the Router, follow the instructions in chapter 2, "Performing a Basic Setup," on page 35.

Downloaded from www.Manualslib.com manuals search engine

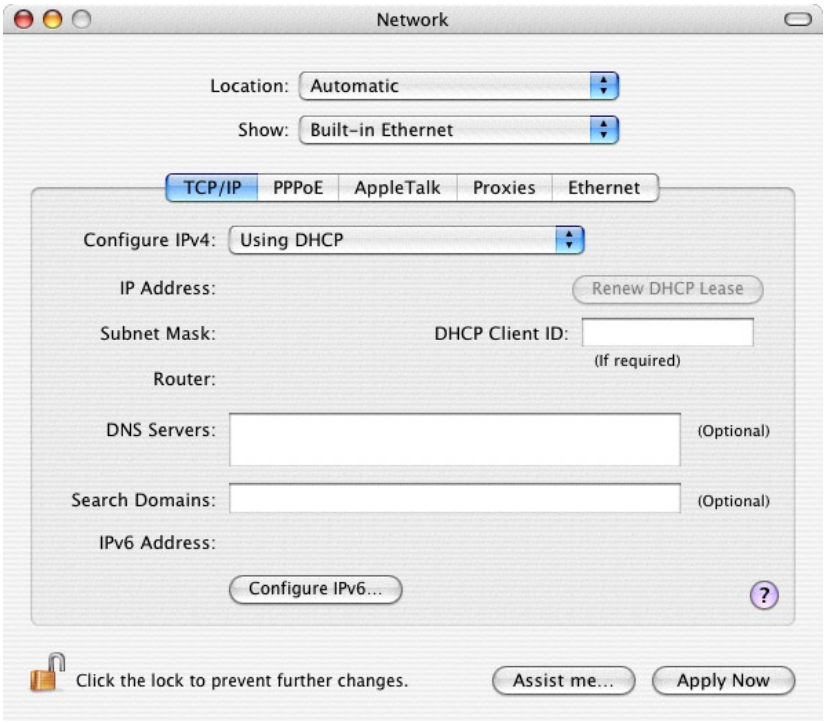
OS X

1. From the Apple Menu, select **System Preferences**.

2. When the "System Preferences" window appears, click **Network**.

Downloaded from www.Manualslib.com manuals search engine

3. The Network window appears. Select **Built-In Ethernet** from the "Show" drop-down list.



4. Select **TCP/IP** and, from the "Configure" drop-down list, select **Using DHCP**.

5. Click **Apply Now** and close the "System Preferences" application. The TCP/IP settings are configured.

To finish setting up the computer to connect with the Router, follow the instructions in chapter 2, "Performing a Basic Setup," on page 35.

Downloaded from www.Manualslib.com manuals search engine

Notices

Regulatory Compliance Notices

Class B Equipment

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by implementing one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected;
- Consult the dealer or an experienced radio or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by A*ction*tec Electronics, Inc., may void the user's authority to operate the equipment.

Declaration of conformity for products marked with the FCC logo – United States only.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference;

Downloaded from www.Manualslib.com manuals search engine

2. This device must accept any interference received, including interference that may cause unwanted operation.

☞ ***Note***: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

For questions regarding your product or the FCC declaration, contact:

*Action*tec Electronics, Inc.
760 North Mary Ave.
Sunnyvale, CA 94086
United States
Tel: (408) 752-7700
Fax: (408) 541-9005

Miscellaneous Legal Notices

© 2004 *Action*tec Electronics, Inc. *Action*tec Installation Buddy, Connection 1-2-3, Solutions for the Digital Life, *Action*tec Digital Gear, and the *Action*tec logo are trademarks or registered trademarks of *Action*tec Electronics, Inc.

All other names are the property of their respective owners.

Downloaded from www.Manualslib.com manuals search engine

Limited Warranty

Hardware: *Action*tec Electronics, Inc., warrants to the end user ("Customer") that this hardware product will be free from defects in workmanship and materials, under normal use and service, for twelve (12) months from the date of purchase from *Action*tec Electronics or its authorized reseller.

*Action*tec Electronics' sole obligation under this express warranty shall be, at *Action*tec's option and expense, to repair the defective product or part, deliver to Customer an equivalent product or part to replace the defective item, or if neither of the two foregoing options is reasonably available, *Action*tec Electronics may, in its sole discretion, refund to Customer the purchase price paid for the defective product. All products that are replaced will become the property of *Action*tec Electronics, Inc. Replacement products may be new or reconditioned. *Action*tec Electronics warrants any replaced or repaired product or part for ninety (90) days from shipment, or the remainder of the initial warranty period, whichever is longer.

Software: *Action*tec Electronics warrants to Customer that each software program licensed from it will perform in substantial conformance to its program specifications, for a period of ninety (90) days from the date of purchase from *Action*tec Electronics or its authorized reseller. *Action*tec Electronics warrants the media containing software against failure during the warranty period. The only updates that will be provided are at the sole discretion of *Action*tec Electronics and will only be available for download at the *Action*tec Web site, www.actiontec.com. *Action*tec Electronics' sole obligation under this express warranty shall be, at *Action*tec Electronics' option and expense, to refund the purchase price paid by Customer for any defective software product, or to replace any defective media with software which substantially conforms to applicable *Action*tec Electronics published specifications. Customer assumes responsibility for the selection of the appropriate applications program and associated reference materials. *Action*tec Electronics makes no warranty or representation that its software products will meet Customer's requirements or work in combination with any hardware or applications software products provided by third parties, that the operation of the software products will be uninterrupted or error free, or that all defects in the software products will be corrected. For any third-party products listed in the *Action*tec Electronics software product documentation or specifications as being compatible, *Action*tec Electronics will make reasonable efforts to provide compatibility, except where the non-compatibility is caused by a "bug" or defect in the third party's product or from use of the software product not in accordance with *Action*tec Electronics published specifications or user guide.

Downloaded from www.Manualslib.com manuals search engine

THIS *ACTION*TEC ELECTRONICS PRODUCT MAY INCLUDE OR BE BUNDLED WITH THIRD-PARTY SOFTWARE, THE USE OF WHICH IS GOVERNED BY A SEPARATE END-USER LICENSE AGREEMENT.

THIS *ACTION*TEC ELECTRONICS WARRANTY DOES NOT APPLY TO SUCH THIRD-PARTY SOFTWARE. FOR THE APPLICABLE WARRANTY, PLEASE REFER TO THE END-USER LICENSE AGREEMENT GOVERNING THE USE OF SUCH SOFTWARE.

Obtaining Warranty Service: Customer may contact *Action*tec Electronics Technical Support Center within the applicable warranty period to obtain warranty service authorization. Dated proof of purchase from *Action*tec Electronics or its authorized reseller may be required. Products returned to *Action*tec Electronics must be pre-authorized by *Action*tec Electronics with a Return Merchandise Authorization (RMA) number marked on the outside of the package, and sent prepaid and packaged appropriately for safe shipment, and it is recommended that they be insured or sent by a method that provides for tracking of the package. The repaired or replaced item will be shipped to Customer, at *Action*tec Electronics' expense, not later than thirty (30) days after *Action*tec Electronics receives the defective product.

Return the product to:
(In the United States)
*Action*tec Electronics, Inc.
760 North Mary Avenue
Sunnyvale, CA 94085

*Action*tec Electronics shall not be responsible for any software, firmware, information, memory data, or Customer data contained in, stored on, or integrated with any products returned to *Action*tec Electronics for repair, whether under warranty or not.

WARRANTIES EXCLUSIVE: IF AN *ACTION*TEC ELECTRONICS' PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, CUSTOMER'S SOLE REMEDY FOR BREACH OF THAT WARRANTY SHALL BE REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT *ACTION*TEC ELECTRONICS' OPTION. TO THE FULL EXTENT ALLOWED BY LAW, THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, TERMS OR CONDITIONS, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES, TERMS OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, CORRESPONDENCE WITH DESCRIPTION, AND NON-INFRINGEMENT, ALL OF WHICH ARE EXPRESSLY DISCLAIMED. *ACTION*TEC ELECTRONICS

Downloaded from www.Manualslib.com manuals search engine

NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE OR USE OF ITS PRODUCTS.

*ACTION*TEC ELECTRONICS SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT OR MALFUNCTION IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLECT, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPT TO OPEN, REPAIR OR MODIFY THE PRODUCT, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OTHER HAZARDS, OR ACTS OF GOD.

LIMITATION OF LIABILITY: TO THE FULL EXTENT ALLOWED BY LAW, *ACTION*TEC ELECTRONICS ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF ITS PRODUCT, EVEN IF *ACTION*TEC ELECTRONICS OR ITS AUTHORIZED RESELLER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT *ACTION*TEC ELECTRONICS' OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Disclaimer: Some countries, states or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers, or the limitation of liability for personal injury, so the above limitations and exclusions may be limited in their application to you. When the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty. This warranty gives you specific legal rights which may vary depending on local law.

Dispute Resolution: The customer may contact the Director of Technical Support in the event the Customer is not satisfied with *Action*tec Electronics' response to the complaint. In the event that the Customer is still not satisfied with the response of the Director of Technical Support, the Customer is instructed to contact the Director of Marketing. In the event that the Customer is still not satisfied with the response of the Director of Marketing, the Customer is instructed to contact the Chief Financial Officer and/or President.

Downloaded from www.Manualslib.com manuals search engine

Governing Law: This Limited Warranty shall be governed by the laws of the State of California, U.S.A., excluding its conflicts of laws and principles, and excluding the United Nations Convention on Contracts for the International Sale of Goods.

Downloaded from www.Manualslib.com manuals search engine